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ABSTRACT

This project measured and evaluated the fringe benefit element of the teacher compensation package available in the 12 Southeastern Regional Council member states: Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virgina. Data were collected by contacting members of the Council representing each state, and by questionnaires submitted to section heads in the state departments of education. Section one of this report presents an overview of the project. The second section contains a specific discussion of the major fringe benefits available. Benefits are described by state, and a tabular summary is given. Section three contains a discussion of the theoretical basis for determining the value to teachers of summertime leisure. The question of whether summertime leisure is a benefit or a constraint to teachers is considered. Section four presents tables of classroom teacher compensation by experience and level. The final section contains a summary of available fringe benefits and policy recommendations, as well as suggestions for future research. A list of references is included. (JD)

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## FRINGE BENEFITS AVAILABLE TO PUBLIC SCHOOL TEACHERS IN THE SOUTHEAST

R.B.M. RESEARCH, INC.

Project Director and Principal Investigator

Rodney H. Mabry

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RESEARCH REPORT

# FRINGE BENEFITS AVAILABLE TO PUBLIC SCHOOL TEACHERS IN THE SOUTHEAST

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# FOREWORD

This project was begun in January of 1985 under the auspices of the Southeastern Regional Council for Educational Improvement which provided a grant through RBM Research, Incorporated, to the project team. We began the project with no preconceived scientific notions, though we were aware of the popular opinions that teachers are probably underpaid and are not likely to have fringe benefits available to them that are comparable to those found in private industry. These notions were not borne out by the evidence gathered nor was either entirely disproved. Here, we simply caution the reader to try to understand the entire report, and not to lift specific comments or results from only a page or a small portion of the report. Further, we were careful to provide our resulting data in detailed form, so that readers might make their own judgments rather than rely entirely on our interpretations and conclusions. For example, fringe benefit values are given with and without our estimates of the value of summer leisure included. Finally, keep in mind that data grows old quickly. Salaries and fringe benefits provided to teachers are changing rapidly each year and are considerably higher now than in 1984-85, the year for which data were collected. However, the work presented provides a solid snapshot of teacher fringe benefit conditions in the Southeast last year by state and in comparison with other industries.

Data were collected by contacting members of the Council representing each state and then by sending questionnaires to designated people, usually section heads in the various state departments of education. We appreciate their responsiveness and wish to acknowledge

their helpfulness here. The primary respondents in each state were the following:

Alabama
Erskine Murray, Assistant Superintendent

Arkansas
B. L. Kincl, Coordinator for General Finance

Florida
Dianne A. Cothran, Associate for State-Federal Relations
G. Lavan Dukes, Administrator, Education Information Services

Georgia
Werner Rogers, Associate State Superintendent

Kentucky
Rebecca Brown, Associate Superintendent for Research and Planning
Lynn Fluegge, Director, Unit for Research

Louisiana
Jerald Joe Hinton, Assistant Superintendent for Research and Development

Mississippi
Thomas Saterfiel, Deputy Director, State Department of Education
N. F. Smith, Director, Bureau of Administration and Finance

North Carolina
Reeves McGlohon, Associate State Superintendent
William Pilegge, Assistant Controller
Audrey Wagoner, Personnel Analyst
Jane Worsham, Management Consultant

South Carolina
Robert R. Hill, Deputy Superintendent for Administration and Planning
JoAnn Kerrey, Chief Supervisor, Management Information Section

Tennessee
James M. Kelly, Assistant Commissioner for General Education
Janice Cunningham, Chief of Benefits and Counseling, Tennessee Consolidated Retirement System

Virginia
William H. Cochran, Deputy Superintendent
M.E. Cale, Associate Superintendent for Financial and Administrative Service
James M. Patton, Director, Teacher Education and Certification

West Virginia
James S. Gladwell, Assistant State Superintendent
Claude Smith, Coordinator, School Finance

We also wish to acknowledge the more than forty-five respondents to our local district survey. These were selected district superintendents in each state and their staff members. Though too numerous to name individually here, we appreciate their generous cooperation just the same.

Thanks go to co-investigators on the project: C.M. Lindsay and M.T. Maloney, who did most of the theoretical and empirical work on valuing summer leisure, and B.H. Mabry, who assisted with the data collection, generation of ideas and writing throughout the project.

Several students at Clemson University worked diligently on the project and deserve recognition. These are Kimberly Tripp (who wrote the rough drafts for most of the state-by-state descriptions of fringe benefits), Peggy James, and Sarah Rockwell.

We also wish to acknowledge the cooperation of the National Education Association, and especially Mr. Barry Robinson of that organization who offered his full assistance in collecting initial data and thoughtfully considering the early questions.

Finally, special thanks go to Ronald Bird, former Research Director for SRCEI, who encouraged and guided us in the early stages of the project; to Charles J. Law, Jr., Executive Director of SRCEI, who has guided us to the conclusion of the project; and to Linda Brady, who has spent many patient hours at odd times preparing the manuscript.

Rodney H. Mabry
Project Director
October 20, 1985

# I. INTRODUCTION

The ability to attract and retain highly qualified public school teachers is an important concern of citizens, state and local government officials, and professional educators at this time. As a result of the feminist revolution and heavy inflation in the 1970s, which together opened almost all occupations to women and also attracted them to a variety of nontraditional, but higher paying positions, public school systems can no longer automatically count on having an adequate supply of highly qualified teachers.

Hence, urgent goals of school system administrators and others at the current time are to (1) retain the quality teachers already in the system, (2) upgrade the skills of less-qualified teachers in the system, or available to it, and (3) increase the pool of highly-qualified new teachers. Attainment of these goals may require significantly higher compensation packages for teachers. Retention of quality teachers already in the system may require more competitive salaries and working conditions. Upgrading skills of those who need it is a "negative" attribute of their current jobs and may also require higher compensation. Higher entrance requirements and curriculum requirements for education majors in colleges may require the prospect of more competitive compensation, if education programs are to be successful in attracting the desired students. Furthermore, recent trends towards longer school days and longer academic school years (to increase the quantity and quality of public school educational output) have certainly increased the need for higher total teacher compensation.

Most state and local school officials, as well as legislators and taxpayers, recognize the possible need for more compensation for

teachers and have begun to take action. The difficulty is that little is known at this time of the exact teacher compensation package--salary, fringe benefits, and working conditions--that is currently in place or the package that is needed to accomplish the consensus goals noted above.

## Purpose and Scope

The purpose of this project is to measure and evaluate the fringe benefit element of the teacher compensation package available in the twelve Southeastern Regional Council member states. These states are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. The major focus of the study is narrowed to fringe benefits for two reasons: first, the least attention has been given to this element of total teacher compensation; second, fringe benefits have become a very important part of total compensation in most industries, a fact that will remain as long as fringe benefits are not taxed as ordinary income by governments. The value of fringe benefits amounted to about one third of total payroll dollars for all industries in the United States in 1983 [U.S. Chamber of Commerce, 1984, pp. 29-30]. Therefore, it is important that as much as possible is learned about fringe benefits for teachers so that full consideration of this element of total teacher compensation can be given when the adequacy of teacher pay is questioned and when additional pay for teachers is proposed.

Very little published information is currently available regarding fringe benefits for public school teachers. The best source for data on fringe benefits is the annual survey published by the U.S. Chamber

of Commerce. This publication has good data from a large survey and reports specific dollar amounts in a meaningful way. The major drawback here, however, is that there is no specific category for teachers. The "miscellaneous nonmanufacturing industries" group includes "research, engineering, education, government agencies, construction, etc." [U.S. Chamber of Commerce, 1984, p. 30]. This is hardly useful to teachers and education institutions, though the data for specific manufacturing, mining, and service industries is helpful for comparison purposes.

Data collected and published by the National Education Association is useful for pupil counts, number of teachers, estimated average salaries by region and state, and the like, but very little data is available on fringe benefits, except retirement. The Educational Research Service in Virginia puts out an annual compensation report that includes fringe benefits for teachers. The fringe benefits section is somewhat unsatisfactory for our purposes because most of the data is presented in percentage form with the raw data and actual dollar amounts concealed. In addition, there is no comparative analysis made in the report, though percentile data by state and by region are presented.

Hence, to understand how education officials in the Southeast can meet their goals partly through the total compensation package, it is necessary to know exactly what that package currently is for public school teachers so that some insight into what it should be in a competitive labor market can be developed.

The specific objectives of this research are to:

(1) Identify the fringe benefits provided school teachers in the twelve Southeastern Regional Council member states,

(2) Calculate the approximate dollar value of each of the major fringe benefits and present as individual and total annual wage equivalents,

(3) Identify the extent to which fringe benefits vary by type and amount within the region,

(4) Examine carefully, theoretically and empirically, the question of whether free time in the summers is a benefit or detriment to teachers, and attempt to place a value on this leisure time,

(5) Compare teacher fringe benefits and total compensation in the Southeast with other occupations in industries nationwide, and

(6) Make policy recommendations concerning fringe benefits as a part of teacher compensation packages in the Southeast.

## Project Timeframe and Data Collection

In January of 1985 all of the members of the Steering Committee of the Southeastern Regional Council for Educational Improvement were contacted and certain basic information, as well as their overall cooperation, was solicited. Responses to general questions in our initial letter and to a detailed questionnaire regarding statewide retirement systems, salary schedules, and leave provisions were received during the months of February and March. In late March and early April, appropriate personnel in each of the state departments of education, representing the twelve member states, were asked to identify local districts that would be cooperative with the project and that would represent a stratified sample of districts along the low-to-high

continuum of total compensation and, particularly, fringe benefits. A questionnaire was sent to these local districts requesting information on salaries, salary supplements, and various local and state fringe benefits for the 1984-85 school year. Some 42 responses to the questionnaire from local districts, along with booklets, personnel handbooks, benefit pamphlets, and the like, were received throughout April, May, June, and July. Information derived from published sources, as well as from our own collection procedures involving local school officials, provides the basis for the fringe benefit portion of this report. The data for the empirical estimation of the value of summer leisure available to teachers came from the Bureau of the Census' Current Population Survey tapes.

## Remainder of this Report

Section II contains a specific discussion of the major fringe benefits available to public school teachers in the Southeast. Benefits are described by state and a tabular summary is given. Section III contains an important discussion of the theoretical basis for determining the value to teachers of summertime leisure. The question of whether summertime leisure is a benefit to teachers or should be considered a constraint (or cost) is answered theoretically, and estimates of the value of that leisure are reported. Section IV presents tables of classroom teacher compensation by experience and education level for each state. These tables show the typical contribution to salary by both states and local districts, as well as the value of state and locally offered fringe benefits. Also in this section, teacher fringe benefits are compared with those available in other industries.

Finally, Section V concludes the report and contains a summary of available fringe benefits and policy recommendations for possible future action by either teachers or state departments of education, as well as suggestions for future research.

## II. FRINGE BENEFITS FOR CLASSROOM TEACHERS IN THE SOUTHEAST

Fringe benefits can be either broadly or narrowly defined. At the broad end of the spectrum, these benefits to workers are said to include any indirect (non-salary) form of worker compensation. In 1953, a pioneering writer, C.W. Sargent, devised five categories of fringe benefits which contain a wide-ranging total of fifty "employee benefits" that may seem somewhat extreme to some readers [Macaulay, 1959, pp. 185-186]. The first category of fringe benefits listed by Sargent is for time not worked, which includes vacations, holidays, lunch periods, sick and maternity leaves, jury duty time, voting time, and more. The second category, monetary awards and prizes for special activities and performance, includes anniversary awards, attendance bonuses, plant neatness bonuses, suggestion-plan awards, quality bonuses, and safety prizes. The third category is bonuses, contributions, and profit-sharing in which the employee renders no direct, regular, or special service. These simply include current profit-sharing payments, stock plan contributions, Christmas-year-end bonuses, lay-off allowances, college scholarship awards for employees' children, and educational subsidies. The fourth category includes items intended to provide employee security such as Social Security payments, workers' compensation payments, and unemployment compensation payments. The last category, "Practices and Services That Benefit Employees Primarily," includes the following items: credit union facilities, food service costs or losses, employee discounts on merchandise, recreational facilities, house financing subsidies, vacation, and health and hospitalization facilities provided at low cost.

The U.S. Chamber of Commerce currently lists fringe benefits available to employees under five major headings [U.S. Chamber of Commerce, 1984, p. 8]. The first is for the employer share of legally-required payments for such benefit programs as social security, unemployment compensation, workers' compensation, and railroad retirement. In the second group are the employer's share of the cost of pensions, insurance, and other agreed-upon benefits. In this category, in addition to the expected pension and health and life insurance benefits, are short-term disability payments, salary continuation payments for long-term disability, dental insurance, discounts on goods and services, employee meals, and miscellaneous payments such as vision care, prescription drugs, termination pay, and moving expenses, among others. The third category, called paid rest periods, is comprised of lunch periods, wash-up time, travel time, clothes change time, and get-ready time. The fourth category is for payments for longer time periods during which no work is performed: vacations and payments in lieu of vacations, holidays, sick leave, payments during state or National Guard duty, jury duty, witness appearances, voting pay allowance, and payments for time loss due to death in family, or other personal reasons. The fifth and final category is simply for other items such as profit-sharing payments, contributions to employee thrift plans, Christmas or other special bonuses, service awards, suggestion awards, etc., employee education expenditures, special wage payments ordered by courts or payments to union stewards, and so on.

Fringe benefits can also be defined somewhat narrowly to include only actual monetary payments by employers on behalf of employees which would include only the amounts paid by employers for such benefits as social security, private pensions, and health and life insurance premiums. This definition would exclude what some people term "working conditions" rather than fringe benefits, i.e., items such as air conditioning in the workplace and short rest periods.

It is not necessary to debate heavily what constitutes a fringe benefit for public school teachers. What the employer is after is output. Such things as a fifteen minute morning break are certainly important to the employer if they increase output and important to the employee as a form of compensation to be bargained for either individually or collectively.

The major fringe benefits we found available to teachers in the Southeast that are the primary focus of this study are the following:

1) social security
2) retirement
3) medical and hospitalization insurance
4) life insurance
5) leave benefits
   - sick
   - personal
   - vacation
   - maternity
   - sabbatical
6) unemployment compensation insurance
7) worker's compensation insurance
8) other fringe benfits
9) summer leisure

These are the primary fringe benefits that are available in most states, but, more importantly, are of considerable size in terms of cost to education systems and value to teachers. Included with "other fringe benefits" are those that are less widely offered or are of lesser

individual value. Examples are reimbursement for required and/or discretionary educational expenses, payments to teachers for unused sick and personal leave, either in cash or as credit towards retirement, and many others.

Now we turn to the descriptions, by state, of fringe benefits available to public school teachers in the Southeast. All categories of fringe benefits listed above are discussed in turn, except summer leisure which is the topic of Section III.

## Teacher Fringe Benefit Descriptions by State

### Alabama

Alabama allots state funds to districts primarily on a per teacher basis and varies the amount depending on the certification classification of each teacher. The only teacher classifications and the amounts funded for 1984-85 are: bachelor's degree, $17,711; master's degree, $20,342; and master's degree plus one or more years beyond, $21,726. There is no experience criterion for allocating funds, but local districts may establish more detailed salary schedules.

### Major State Fringe Benefits

Social Security and Retirement: Public school teachers in Alabama have mandatory social security coverage. Employer contributions to this system are currently 7.05% of the teachers' actual annual pay up to $39,600. In addition, all Alabama public school teachers are required to be members of the state retirement system which provides benefits for retirement, early retirement, disability, and death. Teacher contributions amount to 5% of their annual salary while the state contributes 9.75%.

Retirement with maximum benefits may begin at age 60 provided the member has ten (10) years of creditable service. A member may also retire and receive maximum benefits after thirty (30) years of service, regardless of age. A member who reaches age 70 is required to retire and begin receiving benefits. These benefits are calculated by multiplying average final salary by years of service and multiplying that product by 2.0125%, which yields the maximum annual amount. Average final salary is the average of the three highest salaries within the last ten service years.

Benefits from the state retirement system are not subject to state or local income taxes, but are subject to federal income taxes after benefits equal to contributions are received. There are several optional benefit plans that a teacher may select which pay to beneficiaries; however, selection of an option will cause a reduction in monthly benefits.

If a retiree returns to full time public school service, retirement benefits will be suspended until the member again retires. In order to earn additional credit, the member must return to full-time service for at least two years. After two years the member must make a contribution to the retirement system equal to the amount (plus interest) he or she would have contributed if withdrawal from service had never occurred. A retiree may return to state employment and receive maximum benefits if employment is not full-time and if earnings are not more than social security yearly earnings. The retiree's benefit will not be affected at all by employment with any private industry or private school system or public school system outside Alabama.

The retirement account accumulates interest at the rate of 4% per annum, a portion of which will be refunded upon withdrawal from service. The greater the number of years of accumulated service, the greater the portion of accumulated interest refunded.

Teachers receive one year of retirement credit for each full 180-day school year completed. Alabama public school teachers are eligible to purchase credit for out-of-state service provided they have accumulated at least ten years of Alabama service. Each year of external service purchased will cost 14.75% of the teacher's current annual

salary. This 14.75% is the current state contribution rate (9.75%) plus the 5% member contribution. Up to five years of service credit may be purchased by the teacher. Military service credit may also be purchased for up to four years, at a cost of 4% of the average teacher's salary in Alabama during each year of service claimed plus 8% interest compounded annually from the last date of service to the date of payment.

A teacher is eligible for disability retirement if he or she has credit for at least ten years of service when the disability occurred. To determine disability benefits the same formula is used as that for the retirement benefit, except that a 3% reduction factor is used for every year the member is under age 60 or for each year of service under 30 years. A reduction of 25% is the maximum, with the member receiving the larger of the two calculations. If a member resumes full-time service before age 50, he is required to become a member of the retirement system again; if the retired member is older than 50, he must work full-time for two years before requesting membership. If a disabled retiree accepts part-time employment, the member's salary will be limited to the difference between the annual disability benefit and average final salary regardless of employer.

Medical and Hospitalization: Public school teachers are eligible for medical and hospital insurance under the Alabama Public Education Employees' Health Insurance Plan. The cost of the basic, individual health plan is shared by the teacher and the state, with the state providing $420 per year per teacher. Additional coverage and coverage of dependents are available at extra cost to the teacher. This optional

coverage includes special plans for cancer, hospital indemnity, and dental coverage. Upon retirement, a teacher may still receive coverage with the state paying all the cost of basic coverage.

The state does not pay for dental care for public school teachers. However, though teachers may elect to receive dental coverage through the state health insurance plan, they must pay all costs. Alabama does not offer any separate or specific benefits for vision or auditory care to its teachers.

Life Insurance: Alabama does not provide public school teachers with any state-paid life insurance benefits.

Leave Benefits: Sick leave for public school teachers accrues on the basis of one day per month and may accumulate up to 150 days. This accumulated sick leave may be used as credit towards years of service at retirement. The state of Alabama allows up to two days of personal leave per year at full pay. These are in addition to sick leave.

Sick leave must be used for maternity leave and there is no provision for paternity leave. No vacation leave or sabbatical leave is provided by the state.

Unemployment Benefits: The state of Alabama covers its teachers with an unemployment compensation program which provides a reduced but continuing income if the teacher becomes unemployed due to funding changes or reorganization. The cost to the state for this plan varies depending on local usage.

Workers' Compensation: Alabama does not provide funding for a workers' compensation plan, though local districts may finance such programs.

Other State Fringe Benefits: Another benefit provided by Alabama is the Public Employees' Individual Retirement Account Fund (PEIRAF), created by the Alabama legislature, toward which public employees may make voluntary contributions. These contributions are termed deductible voluntary employee contributions (DEC's) and are comparable to an IRA.

State Fringe Costs: Teachers are required to take classes in order to maintain proper certification. The state provides no funding for such classes, causing the total cost to fall on the teacher unless local districts intervene.

## Typical Local Fringe Benefits

Fringe benefits for public school teachers such as social security, retirement, and health insurance coverage in addition to certain leave benefits and unemployment compensation are provided by the state of Alabama. Local systems also supply various benefits in addition to these. These "extras" are described below. Three different school districts -- a low paying, medium paying, and high paying district -were surveyed in order to get an idea of typical local benefits for which teachers are eligible.

Retirement: No extra retirement benefits are provided by the local districts surveyed.

Health and Hospitalization: No extra medical benefits are provided by the sample local districts in Alabama.

Life Insurance: Only one district provides life insurance benefits for teachers. The standard policy is $5,000.00 per teacher and the annual cost to the district per teacher for such a policy is $17.88.

Leave Benefits: Alabama public school teachers are allowed 150 days of accumulated sick leave. The high paying school district allows

teachers to receive payment annually for any unused sick leave in excess of 150 days. The system pays the teacher $33.50 for each day accrued over the 150 day state limit. Alabama allows teachers two days of personal leave but local districts have the authority to offer more, if they choose to do so. Two of the three districts questioned do provide additional days, ranging from 3 to 5, while the third district requires teachers to pay for substitutes for any personal leave over 2 days. The rate for a substitute is $20.50 per day in this county.

The high paying district also provides teachers with professional leave with pay, which can be used to attend professional meetings and educational workshops.

Unemployment Compensation: This state-provided benefit is not augmented at the local level.

Worker's Compensation: The three Alabama school districts surveyed all provide worker's compensation programs. The average annual cost to the district per teacher is 27¢ per thousand dollars of each teacher's salary.

Miscellaneous Local Fringe Benefits: The high paying school system provides teachers with liability insurance coverage of $10,000.00. It also reimburses teachers for fees for workshops that satisfy recertification requirements and also for those that are purely discretionary.

## Arkansas

Arkansas has a locally oriented public school system in which the state contributes the majority of funds on a formula basis. For a sample of districts, the state's contribution averages 77% of local school system total expenditures while local districts contribute the remaining 23%. The only exception to this is the retirement system cost to the employer which is paid entirely by the state. Hence, though costs for almost all fringe benefits and salaries appear to fall on localities, we have allocated the burden of these costs according to the 77% - 23% split.

## Major State Fringe Benefits

Social Security and Retirement: Public school teachers in the state of Arkansas are required to be members of the social security system. The cost of this system is shared by the local systems (using the state's money and their own) and the teacher. Employer and teacher costs each equal 7.05% of teacher salaries.

The state of Arkansas has, for its public school teachers, a mandatory retirement plan called the Arkansas Teacher's Retirement System (TRS) to which the state pays all employer contributions by appropriation. This system provides benefits for service retirement, disability retirement, early retirement, and death and survivor benefits.

The cost to teachers for the retirement system is 6% of their actual annual salaries. Annually required employer contributions by the state are recomputed every year on an actuarial basis to keep the system sound and are not credited to the teacher's account until he

or she retires. Teachers in Arkansas may retire and receive full benefits if they are at least 60 years old with 10 or more years of service credit, or if they have 30 years service credit regardless of age. Members may retire early at a reduced benefit if they have 25 or more years of service credit and are not yet 60 years of age. A teacher becomes vested in this retirement system after acquiring ten years of service and may, upon termination of service, choose to withdraw contributions from the system or to receive a deferred retirement. If the member chooses a deferred plan he or she leaves all contributions in the account and receives a benefit once the retirement age of 60 is reached (or age 55, if at least 25 years of service credit exists).

The retirement benefit amount is calculated based on average annual salary and number of years of service. The final average annual salary is calculated by averaging the highest five years of covered salary. The benefit is then paid on the basis of the product of years of service, final average annual salary, and 1.59 percent, subject to a benefit floor of $1,800 per year.

There are several optional plans from which the teacher may choose. Selection of an option may pay benefits to a spouse or other beneficiary, but will lower the monthly benefit amount as a result.

Teachers receive one year of service credit for every full school year (at least 120 days) that they teach. They may also receive credit for fractional years.

If a member is vested in the Arkansas TRS, up to ten years of out-of-state service credit may be purchased. The cost of such credit will depend on the employee's salary at the time of purchase. Credit also may be purchased for overseas and military service.

Retirees may return to full or part time employment in positions covered by the TRS; however, retirees are subject to the social security earnings limitation. The teachers retirement limitation increases with the social security limitation. If the retiree exceeds the TRS limitations, benefits cease until employment ceases, at which time he or she will again receive benefits.

If the Consumer Price Index (CPI) has increased 3% or more during the previous year, all teachers who have been retired for at least one year will receive a 3% increase in their benefits. If the CPI increase was less than 3%, then benefits will be adjusted by the actual smaller amount.

As mentioned above, teachers are eligible to receive disability benefits only after they become vested members of the TRS. In order to qualify for this retirement, a teacher must become totally and permanently disabled.

Health and Hospitalization: The cost of basic health and medical insurance coverage for teachers is shared. The employee contributes $13.36 per month and the employer contributes $35.00 per month per teacher for such a policy.

No dental care or coverage for vision and auditory care is available in the state-wide plan. No provision for long term disability is available from the state.

Life Insurance: A statewide life insurance program is available to Arkansas public school teachers through their local districts. The cost is 80¢ per teacher (or $9.60 annually) for a $5,000 term life

policy. This policy will pay to a designated beneficiary for accidental death and dismemberment as well.

Leave Benefits

Sick Leave: Teachers in Arkansas are allowed one day of sick leave per month and may accumulate at least 45 days of sick leave time; however, local districts may set their own limits. Any personal leave time is determined by local districts; there is no state mandated minimum number of days. Maternity leave counts against sick leave. There is no state provision for separate maternity or paternity leave. Arkansas also makes no provision for sabbatical leave. If any school systems do have such a program, it is locally determined.

Unemployment Compensation: The state of Arkansas has an unemployment compensation pool to which local systems contribute a total of 1/4 of 1% of actual teachers' salaries.

Workers' Compensation: Local systems provide funds for workers' compensation based on employer gross payroll for the year. Total gross payroll is multiplied by .00093 to obtain the proper district contribution.

Other State Fringe Benefits: The state will provide, to qualified teachers, loans that pay for tuition, books, and supplies for required coursework. Teachers have 36 months in which to repay the interest-free loans.

Typical Local Fringe Benefits

While the state of Arkansas does provide money for fringe benefits for public school teachers, local systems share these costs. Extra non-state-mandated benefits are discussed below as local fringe benefits,

though funds used to pay for these benefits come from the common pool of both state and locally generated monies. Three districts--low, medium and high paying--were surveyed to determine their benefit policies.

Retirement: No surveyed districts provide extra retirement benefits beyond the state plan.

Health and Hospitalization: No surveyed districts provide extra medical retirement benefits beyond the state plan.

Life Insurance: Two of the three districts pay for life insurance for teachers. The high paying district provides a $30,000.00 term life policy that costs the district $75.60 per teacher annually. The middle paying district offers a $10,000.00 policy for which the cost to the district is about $30.00 per teacher annually.

Leave Benefits: The state of Arkansas allows unused sick leave to accrue up to a limit of 45 days. The high paying county allows teachers to accumulate up to 60 days. Teachers in the other two districts are paid for any leave days that they cannot accumulate over 45.

Local districts alone determine the number of personal leave days to allow teachers. The high paying district allows two days per year while the other two districts allow one, but the high paying district charges personal leave against sick leave. Another district does not charge used personal leave against sick leave, but requires that the teacher pay the cost of a substitute ($35.00).

Unemployment and Workers' Compensation: All three districts offer workers' and unemployment compensation programs. The table below shows the different costs to each district.

| District | Amount for Workers' Compensation | Amount for Unemployment Compensation |
|---|---|---|
| High | .00093 x teacher's salary | .0025 x teacher's salary |
| Middle | .003 x teacher's salary | based on actual annual claims |
| Low | $16.00 per year per teacher | $127.00 per year per teacher |

Miscellaneous Fringe Benefits: One county in Arkansas reimburses teachers for college courses satisfying recertification requirements and for workshops that satisfy recertification requirements, but will not reimburse teachers for discretionary courses or workshops. Another county provides teachers with some of the fees for workshops that satisfy recertification requirements or are taken for purely discretionary reasons.

## Florida

There is no state salary schedule in Florida. The state funds all local systems on the basis of full time equivalent students at rates adjusted for type of program (K-3, high school, vocational, etc.), cost-of-living differences, sparsity of student population, and more. Localities pay employer costs for social security, health care, and the like with a combined pool of state funds (allocated per student) and self-generated funds. For non-federal positions or programs, the state allocates funds sufficient to pay an average of 65 percent of total local expenditures.

## Major State Fringe Benefits

Social Security and Retirement: Florida public school teachers are required to participate in the federal social security program. The amounts contributed by the state of Florida and by public school teachers are equal and each is 7.05% of actual annual salary.

Membership in the Florida Retirement System (FRS) is mandatory for all public school teachers in this state. This plan provides benefits for service retirement, early retirement, disability retirement, and survivorship. Local systems have the authority to offer employees, in addition to FRS, supplemental retirement plans to which membership is optional. Many districts do offer such plans.

Contributions toward the FRS are made solely by the state of Florida. Teachers have not contributed any part of their monthly salaries for the state retirement system since 1925. The amount contributed by the state for each teacher is 12.24% of actual annual earnings.

Members of the FRS may retire at full formula amounts, if they are age 62 with 10 or more years of service credit, or if they have

30 years of credit regardless of age. Almost any type of creditable service, including military service, may be purchased and counted toward the 30 year requirement. To purchase credit for out-of-state service, teachers pay the actuarial cost of the out-of-state service to the FRS. Members of the FRS become vested in the system after completing 10 years of service. After such time, teachers are eligible for retirement but the benefit will be reduced by 5% for each year that the member is under age 62 if the member has less than 30 years service credit.

To determine the annual retirement benefit, a formula is used that considers total years of creditable service, age at retirement, and average final compensation. The average final compensation is determined by averaging the teacher's five highest years of covered salary. The maximum annual benefit is the product of years of service, average final compensation, and two percent. As mentioned above, this benefit will be reduced if the member retires early. There are also several optional plans from which the employee may choose. By selection of an option, monthly benefits amounts will be reduced.

If public school teachers in Florida become completely and permanently disabled, they are eligible through the FRS to receive disability benefits. There are two types of disability: In-line-of-duty and regular disability. For in-line-of-duty disability, teachers will receive a benefit calculated just like regular retirement which is not to be less than 42% of average final compensation. Teachers become eligible for regular disability if they have completed at least five years of service as of July 1, 1985. If not, the teacher must have

10 years of creditable service to qualify for regular disability retirement. If a teacher does qualify for this type of retirement, he or she will receive a benefit calculated just as for regular retirement or 25% of average final compensation, whichever is greater. If the member, upon becoming totally disabled, is already eligible for regular retirement, then the benefit will just be that for regular retirement and the 25% minimum does not apply.

Cost of living adjustments in retirement benefits are made each July 1. These changes reflect those of the cost-of-living index up to three percent per year.

Upon retirement, teachers may seek other employment in a position not covered by the FRS and still receive all retirement benefits. A retiree may not seek employment in any position covered by the FRS for one year after he or she retires or benefits will be suspended. Further, reemployment in any FRS covered position is limited to $4,000 in earnings annually, or benefits will be suspended. If the retiree is age 65 or over, there are no restrictions or limitations on any reemployment.

Health and Hospitalization: The state does not provide a basic health and hospitalization plan for teachers. This is left to local districts.

Life Insurance: Florida provides no life insurance coverage for public school teachers.

Leave Benefits:

Sick Leave: Teachers in Florida are allowed one day of sick leave per month and these leave days are allowed to accumulate from year

to year without limit. Teachers are not required to pay the cost of a substitute when on sick leave. Though teachers are also allowed up to six days of personal leave by the state, this leave is charged against sick leave so that the total of leave days granted for accumulation is still one per month. Local districts are allowed to have policies that exceed these minimums.

Whether or not teachers may receive maternity or paternity leave is up to individual districts. This is also true of sabbatical leaves; there is no state policy.

Unemployment Benefits: Florida does not bear the costs of teacher unemployment programs. Local districts reimburse the state annually for actual use.

Workers' Compensation: Local districts are entirely responsible for the cost of any workers' compensation plans they have in force.

## Typical Local Fringe Benefits

The state of Florida provides local school districts with some fringe benefits for public school teachers and requires others. Other benefits for teachers are supplied by the local systems themselves. Three Florida school districts were surveyed in order to obtain information concerning the extra benefits they provide for teachers.

Retirement: The high paying school district provides a locally funded and administered early retirement plan. This plan is provided in addition to the plan by the Florida Retirement System (FRS). Members of the FRS are eligible for this early retirement plan if:

1) They are at least 55;

2) they have between 25 and 28 years of service credit;

3) they have already retired under the FRS plan.

What this plan does, basically, is eliminate the penalty for retiring early by paying the retiree the difference between the FRS early retirement benefit and what would have been received had the member not retired early. The middle paying district also provides this early retirement benefit for teachers but does not guarantee funding beyond the current fiscal year. The cost to the high paying district for this benefit is .2845% of teachers' annual salaries. There is no information concerning the cost to the average district for this plan.
The cost for coverage varies from system to system with some districts providing insurance at no cost to the teacher while other districts provide coverage at a cost to the teacher. The cost to the district for health care coverage for teachers also varies from $720 in one Florida county to $2,000 in another.

Of the three districts evaluated, only one provided its employees with dental and vision care coverage. Other districts may have had such care available but the extra cost of such rests with the teacher, not the local system.

Life Insurance: Just as with health and medical insurance, local systems do offer life insurance at various costs both to the teacher and to the district. In one county, the cost to the district per teacher per year is $108 for a policy equal to the teacher's salary rounded to the next $1,000. The teacher makes no contribution for basic life

insurance plans in this county. Another county offers a $10,000 policy which is lumped together with health insurance and was previously mentioned. The third county offers its teachers life insurance at a cost of $40.32 per year for the district and no cost to the teacher for a $10,000 policy. Added benefit life insurance plans are available to teachers for which they bear all costs.

One county allows teachers up to one year of maternity leave without pay and this leave is not charged against sick leave. In another county, school teachers can receive medical leave at any time, without pay, based on a doctor's statement. Maternity leave is included in this. Maternity leave may come from sick leave or the individual may request medical leave. A third county which was evaluated had no maternity leave policy, and instead, missed days must come from accumulated sick leave.

Sabbatical Leave: One of the counties which we surveyed funds a sabbatical leave program for teachers. For this type of leave, the teacher will receive one-half salary for one year. The teacher may also continue to be a part of the group insurance plan and time spent on sabbatical leave may be purchased and credited toward retirement.

Workers' Compensation: Local systems provide programs for workers' compensation. Local districts contribute to these programs; the amount of contribution varies. The costs of these plans vary from county to county from .29% of salaries (about $55) on the low side to a high of $112.

Unemployment Compensation: The cost of this program, like the cost of the workers' compensation program, varies by district. In

one county surveyed, this cost is $400.00. Other systems reimburse the state for actual expenses incurred by the state for its teachers using the program.

Miscellaneous Local Fringe Benefits: Teachers in all three local Florida districts surveyed are eligible to receive credit for unused sick leave. The following is the scale used in one district at retirement or termination to reimburse teachers for unused accumulated sick leave.

1-3 years = 35% of last daily salary rate x # of days
3-6 years = 40% of last daily salary rate x # of days
6-9 years = 45% of last daily salary rate x # of days
10-12 years = 50% of last daily salary rate x # of days
13+ years = 100% of last daily salary rate x # of days

Another district reimburses teachers annually for unused sick leave that year at the rate of 80% of their current daily salary rate if they used no more than three sick/personal days that fiscal year and if they currently have a minimum of 21 accumulated unused sick leave days. The third district simply pays teachers for 50% of their accumulated sick leave days at retirement or termination at their current full daily salary rate.

Only one county within the state of Florida offers an extended leave policy without pay, as well as hardship/dire emergency leave, for teachers as an added fringe benefit.

The state of Florida generally does not reimburse teachers for costs of college courses taken to satisfy recertification requirements. Local districts are authorized to provide the funds for classes and most do so.

The high and low paying districts, and in some cases the average paying district, provide teachers with reimbursement for college courses taken in order to maintain certification. Money for discretionary college courses is provided by the low paying district and also by the high paying district (if these courses apply toward a master's degree). The low and, in some cases, the average paying districts provide fees for workshops satisfying recertification requirements. Fees for discretionary workshops are also provided by the low paying district.

The high paying district provides its employees with the option to participate in the Variety of Individual Selections Trust Account (VISTA) program. The local school board contributes $300.00 per month toward this program for each eligible employee. The account earns interest which can be used to provide other benefits.

There are two types of VISTA benefits -- Account A benefits and Account B benefits. The board pays A benefits and the teacher pays B benefits through payroll deductions. VISTA Account B benefits selected are tax-free. Participants in the VISTA program select Account A benefits and Account B benefits that best fit their needs and situations.

Some benefits available under option A include:

1) Income Protection;

2) Life Insurance;

3) Accident Insurance;

4) Legal;

5) Physical Examinations and Diagnostic Plan; and

6) Dependent Group Medical.

Account B benefits include:

1) Account A Plans, minus Dependent Life Insurance;

2) Dependent Group Medical, Dental, and Vision Premiums;

3) Reimbursement Account for Uncovered Medical Expenses;

4) Day Care Expenses Reimbursement; and

5) Hospital Income Maintenance.

## Georgia

The state of Georgia provides its school systems with the majority of funds for salaries and fringe benefits paid to public school teachers. Local districts supplement this compensation by supplying additional funds for salaries and for established state fringe benefit plans and by providing funds for additional fringe benefits provided at the local level.

## Major State Fringe Benefits

Social Security: Social security coverage is optional for Georgia's public school districts. Only a minority of school districts in Georgia have opted out of the social security system. In those cases, such as the DeKalb County school system, alternative supplementary retirement and disability insurance plans have been set up in which employees are encouraged to invest. The DeKalb County Board of Education, for example, allocates to its Alternative Plan an amount of money that is slightly less than the amount that would have been paid to social security. The employee is "strongly encouraged" to invest the money the employee would have paid in social security taxes in this, or any other, alternative tax sheltered annuity plan. This plan provides benefits similar to those of social security: basic life insurance and survivor benefits, long-term disability insurance purchased with part of the contributions, and a tax-sheltered annuity that is set up for each member with the remaining contributions. What is exciting about this plan is that the employee's contribution to it is entirely voluntary and whatever they choose to invest in addition to the amount invested by the district for them in the Alternative Plan will be fully available to them or their estate rather than being dependent on social security rules in force at the time of retirement. 41

Retirement: The Georgia system requires all public school teachers to belong to the Teachers' Retirement System as a condition of employment. This retirement system provides benefits for retirement, early retirement, and disability. With respect to cost, teachers contribute 6.5% of their annual salaries to the retirement system; though 6.0% is actually for retirement and 0.5% is to pay for a life insurance plan. The state contributes to the retirement system, on behalf of each teacher, 13.23% of each teacher's annual earnings. Further, retirement benefits received from the Teachers' Retirement System are not subject to state income taxes in Georgia. After the retired member has received monthly benefits equal to the amount contributed during active membership, benefits are then subject to federal income tax. Of course, this usually occurs after one and one half to two years of retirement.

Teachers may receive full retirement benefits after they reach 62 years of age or complete 30 years of service, regardless of age. A teacher who is at least 60 years old may take early retirement with less than 30 years of service. Benefits are reduced in this case by one-fourth of one percent for each month the member is under age 62.

Finally, if a teacher becomes permanently disabled and has at least 9½ years of creditable service, he or she may apply for disability retirement. Retirement benefit amounts are based on a period of highest average salary and length of service. Highest average monthly salary is determined by averaging the monthly pay for the highest 24 consecutive calendar months of salary. This average salary is then multiplied by 2%, and then by the number of years of creditable service. The

resulting product is the monthly retirement benefit under the maximum plan of retirement. For teachers retiring early, benefits will be reduced as noted earlier. Optional retirement plans may be selected to pay the spouse's beneficiaries or have other special features. These optional plans may reduce the monthly benefit but may alter, either upward or downward, the net present value of the total retirement benefit at the time of retirement. A member who has at least 9 months of service during a fiscal year receives credit for one full year of service. The Teachers' Retirement System account stays active if the teacher is an active contributing member at least one year out of any five consecutive years. After teaching for six years in Georgia, a teacher may establish up to ten years of out of state service. The cost to the teacher to obtain credit for this service is 8% of the annual salary earned in the other state plus accrued interest if the teacher was ever a member of the Teachers' Retirement System of Georgia prior to April 1, 1966. If membership began <u>after</u> April 1, 1966, the cost is the total applicable member and employer contributions plus accrued interest. Credit for teaching in private schools, colleges, interdenominational schools, foreign schools, and military service schools, cannot be established through the Teachers' Retirement System in Georgia. The retirement system in Georgia includes a disability section. Disability payments are fairly easy to determine since they are calculated using the percent of salary formula just as regular retirement benefits are calculated, except that there is no age requirement for disability retirement.

<u>Health and Hospitalization Benefits:</u> The medical and hospital costs of public school teachers in Georgia are covered under the state's

health insurance program. This program is called the Georgia Health Benefit Plan (or HBP). The HBP, a self insured plan, is managed by the Georgia State Merit System. The state shares the cost with individual teachers under a standard plan. However, teachers must pay the full cost of any additional coverage if they choose a higher-option plan. Under the standard plan, the state contributes 3.9% of teachers' salaries towards the total cost of the plan, and teachers pay a flat amount of approximately $12 per month. If a teacher retires and is to receive retirement benefits that are sufficient to pay the rates approved by the State Personnel Board, his or her current level of health insurance coverage can be continued with deducted payments toward the HBP. If a teacher retires, but is not eligible for retirement benefits, he or she can still receive health insurance through the HBP only if he or she has at least 20 years of service. Besides standard health and hospital insurance, Georgia does not carry any type of specialized care insurance with its basic health plan. There are no separate or specific benefits for vision or auditory care or for long-term disability. Benefits of this type are sometimes available at the local district level.

Life Insurance: The state of Georgia does not contribute any funds towards life insurance policies for classroom teachers. However, local districts may provide such coverage. Teachers do receive a life insurance plan but they pay its full cost and are forced to do so through a contribution of one-half of one percent of their annual salaries to the state Retirement System.

Leave Benefits: Public school teachers in Georgia accrue sick leave on the basis of one and one-fourth days for each month of active service, or 12½ days for their regular, 10-month school year. Unused sick leave may be carried over from year to year, and can accumulate to a maximum of 45 days. Some local school districts allow school teachers to accumulate more than 45 sick leave days, but then they must come up with the funds to pay teachers when they use their excess accumulated sick leave days. Accumulated sick leave days are transferable across school districts in the state.

The state allows public school teachers 3 days for personal leave, though use of these days counts against sick leave accumulation. There is no provision by the state for maternity leave. Sick leave must be used for absence due to maternity, and such absence requires a physician's statement of disability. No paternity leave is specifically recognized by the state, nor is there a state program for sabbatical leave.

Unemployment Benefits: The state of Georgia makes no contribution to unemployment compensation for public school teachers. Local districts, however, can provide this funding.

Workers' Compensation: Teachers in Georgia are covered under a workers' compensation plan for work-related injuries that is entirely paid for by local districts.

Other State Fringe Benefits: No additional state fringe benefits, other than the major ones noted above, are offered.

State Fringe Costs: Public school teachers in the state of Georgia are required to renew their teaching certificates every five years.

To do so, teachers must have ten hours of college credit. As of now, there is no funding provided by the state for these college or continuing education courses. Beginning in fiscal year 1987, Georgia will provide funds for teachers' tuition for such courses. For the present, however, tuition, travel, books, and time costs for required continuing education are quite significant, and represent, in effect, a net reduction in pay.

## Typical Local Fringe Benefits

The state of Georgia provides its teachers with fringe benefits such as social security (or a comparable plan), retirement, leave time and worker's compensation. Local districts supplement this state compensation by supplying additional funds for existing plans and by providing funds for additional fringe benefits. Three districts from this state were surveyed in order to obtain information from representative high, medium, and low paying school systems. Benefits offered by each district are described below.

Social Security and Retirement: Membership in the social security program is not mandatory for public school teachers and some local districts have set up alternative coverage plans in which employees are urged to invest. The high paying district has set up such a plan which is a tax sheltered annuity. The board pays an amount equal to 6.1% of gross salary (in lieu of social security payments).

For local districts with social security plans, the local system contributes 7.05% of the total salary to this program. Local systems also contribute toward retirement, 12.71% of the local portion

of teachers' salaries. In Georgia, the state pays part of the teacher's salary and most local systems provide a salary supplement. The typical local salary supplement is $1,535 and the typical total salary is $20,993; therefore contributions by local systems toward social security and/or state retirement plans are $1,480 and $195 respectively (per teacher per year).

Health and Life Insurance: The high paying district offers its teachers both health and life insurance plans. The health coverage for this system provides a dental assistance plan and specified disease insurance. This benefit costs the system $82.20 per teacher annually. The life insurance benefit costs the local district about $11.00 per teacher annually. The basic life insurance plan for teachers with no dependents is a policy equal to double the annual salary not to exceed $50,000. This district, in addition to providing its own health and life insurance programs, also pays the teacher's cost of the basic state health plan. The annual cost to the district for such is $163.20 per teacher.

The average district does make available an accident plan and a cancer plan, but the teacher is required to pay the entire cost.

In the low paying district, the local system pays the teacher's portion of the cost of the basic state health plan. The amount of this benefit (annually) is $163.20 per teacher. In addition, this district provides a $10,000 life insurance policy which costs the system $13 per teacher per year.

Leave Benefits: Though each district surveyed allows the same number of sick leave days (1¼ per month which equals the state minimum),

they vary with respect to accumulation limit. The high paying district allows 120 days of sick leave to accumulate, the average system allows 80, and the low paying allows accrual of 45 days.

Regarding maternity leave, all systems charge this against sick leave. The high paying district allows 30 maternity leave days, the average district allows 6 weeks, and the low paying district allows 45 days.

Only the high paying system provides a sabbatical leave benefit. Teachers who qualify for this type of leave will receive one-half salary for one year.

Unemployment and Workers' Compensation: All three districts surveyed offer worker's and unemployment compensation programs. The costs to the districts for these plans vary; the following table shows the amount that each district pays annually.

| District | Workers' Compensation | Unemployment Compensation |
|---|---|---|
| High paying | $28.50 per teacher | $12.00 per teacher |
| Average paying | .08% of gross salary | .1% of gross salary |
| Low paying | $20.00 per teacher | $15.00 per teacher |

## Kentucky

Kentucky's system is a "minimum foundation" program supplemented by locally generated funds. The basic foundation amounts allocated to local districts by the state include scheduled minimum salary amounts for teachers (based on education and experience levels) and other school personnel, as well as monies for current expenses ($4,320 per classroom unit in 1984-85), for capital outlay ($1,800 per classroom unit), and student transportation. A state-wide salary schedule is in place which is augmented by local supplements.

## Major State Fringe Benefits

Social Security and Retirement: Public school teachers in Kentucky make no contributions toward nor do they receive any benefits from social security. Teachers are required to be members of the Kentucky Teachers' Retirement System (TRS). This system provides benefits for retirement, early retirement, disability retirement, death and survivor benefits, and medical insurance for retirees.

Teacher contributions for retirement are 9.6% of their annual salaries. The state's contribution is equal to the contribution of all of the members plus an annual overmatch of 3.25% of total member salaries. Retirement annuities are exempt from any Kentucky income tax but are subject to federal taxes upon retirement. All retirees are covered by a $2,500 death benefit.

The minimum age required for full retirement benefits is 60; however, a member with 30 years of Kentucky service may retire with full benefits regardless of age. Members with at least five years of Kentucky service (at least two of these years must have been after

July 1, 1941) may retire at age 55, but the benefit is reduced 5% for each year the member is less than 60 or by the number of years the service is less than 30, whichever number is smaller. Out-of-state or military credit cannot be used as credit for the five years. Out-of-state service may be used as credit for members who are retiring with 30 years of service; up to 8 years of out-of-state service may be used and 6 additional years of military service. Such members must contribute 7.84% of the final average salary for each year of out-ofstate service used to make up the 30 years. Members who are under the age of 55 may retire with as little as 27 years of service but their benefits are reduced 10% for each year the service is less than 30 years.

To calculate benefits received under the basic retirement plan of Kentucky, the following steps are taken:

1. The number of years service between July 1, 1941 and June 30, 1983 is totaled, multiplied by the average of the five highest salary years during any period of service, and this product is multiplied by 2%.
2. Service for 1983-1984 should be multiplied by the 5-year-average-salary and then by 2.5%.
3. Any service after July 1, 1984 should be totaled and multiplied by the 5-year-average-salary and then by 2.5%.
4. The sum of these three calculations is the maximum annual benefit.

There are a number of optional plans that may be selected that pay to spouses or beneficiaries or have other features. Selection of such options will reduce the retiree's yearly annuity amount because of the additional benefits.

To qualify for disability benefits, a member must have at least 5 years of Kentucky service credit (the last year of this service being just prior to retirement) and be less than 60 years of age. Some members over 60 may qualify for benefits under special conditions. Disability retirees may receive one year of disability retirement for each 4 years of Kentucky service. Each member automatically receives at least 5 years of credit if he or she meets disability requirements. The monthly benefit is calculated by multiplying their 5 year average salary (calculation of this is shown above) by 60% and then dividing by 12.

The basic benefit to a surviving spouse is $180 per month; if the surviving spouse's income is less than $500 per month, the benefit will be $200 per month. If a member of the TRS dies after a minimum of 10 years service, the surviving spouse may receive a benefit equal to the benefit that would have been paid to the deceased member when eligibility conditions were met. The surviving spouse would begin receiving these benefits when the age of the deceased member would have met retirement requirements. The monthly payments will continue until the spouse dies or remarries. Dependent children under age 18 qualify for survivor's benefits regardless of income or marital status of the surviving spouse. After reaching age 18, children may still be eligible for benefits if they are full-time students in a "recognized educational program." If a student becomes classified as part-time,

drops out, graduates, or turns 23, benefits cease. If, at any time, a child marries, benefits cease.

Dependent parents or siblings may qualify for survivor benefits in the absence of a surviving spouse or children. To qualify they must have been receiving at least one half of their support from the deceased member.

| Survivor Benefit Payments (monthly): | |
|---|---|
| One Child | $165 |
| Two Children | $290 |
| Three Children | $340 |
| Dependent Parent | $200 |
| Dependent Brother or Sister | $165 |

Health and Hospitalization: All public school teachers in Kentucky may receive coverage through Blue Cross and Blue Shield. There is no cost to the teacher for this basic plan; the State's contribution is $53.82 per teacher per month. Other plans through Blue Cross and Blue Shield may be selected at additional cost.

Alternative health and hospitalization insurance is also provided by other companies in various counties. Some of these other companies are:

1) Humana
   - the employee makes no contribution for the basic plan and the state contributes $50.07 per month.

2) Health America

- the teacher pays $8.85 for the basic plan and the state pays $53.82.

3) HMO Kentucky, Inc. (Blue Cross/Blue Shield Plan 2000)

- the states' contribution is $52.55 and the employee contributes nothing for the basic plan.

4) Independence Health Plan of Kentucky

- state contributes $53.82 and the employee contributes $5.83 for the basic health plan.

Through each of these additional firms, expanded coverage may be obtained at full cost to the teacher. There is no provision for dental, vision, or auditory care in the basic plan provided by the state.

Life Insurance: The state of Kentucky provides its teachers with a $3,000 life insurance policy. The cost to the state is 63¢ per month or $7.56 per year for each teacher.

Leave Benefits: Teachers may earn up to 10 days of sick leave per year and sick leave days can accumulate from year to year with no limit. The teacher may be compensated, upon retirement, for each unused sick leave day. Each district is also able to provide up to 3 personal leave days (at full pay) per year for teachers.

Maternity leave must come out of accumulated sick leave and there is no provision for paternity leave. Kentucky also offers no sabbatical leave program.

Unemployment/Workers' Compensation: The state of Kentucky makes no contribution to an unemployment compensation program for teachers. Teachers are eligible for workers' compensation but the funding for this is provided by local districts.

Other State Fringe Benefits: One other fringe benefit to which teachers in Kentucky are entitled is the ability to use accumulated, unused sick leave for credit toward retirement. The amount of compensation for which the teacher is eligible is based on a percentage, not to exceed 30%, of the teacher's daily salary rate calculated from his or her last year of salary. This amount is paid by the local district, not the state, and will then be incorporated into the member's final year of service salary.

Some teachers may receive benefits for college tuition through math and science scholarship programs. Teachers in Kentucky are required to earn master's degrees within a certain period of time; therefore these scholarships may help provide them with some of the funds necessary to pay for this additional education.

State Fringe Costs: As stated above, public school teachers are required to eventually earn master's degrees. If they do not receive funds through math and science scholarship programs, the teachers must pay for necessary college courses themselves.

## Typical Local Fringe Benefits

Public school teachers in the state of Kentucky receive fringe benefits provided by local school districts in addition to those available from the state. Locally provided benefits are described below

for representative high paying, average, and low paying Kentucky school districts.

Retirement: None of the local districts surveyed supplemented the state retirement system even though teachers in Kentucky are not covered by social security.

Health and Life Insurance: The high paying Kentucky district provides teachers with a cancer insurance plan at an annual cost of $18.00 per teacher to the district. In addition to this plan, the high paying district also provides life insurance for teachers. The basic policy amount is $13,500 and costs the district $28.00 per teacher per year. Life insurance is also offered by the average paying district to its teachers. The policy amount is equal to the salary of the teacher rounded to the next highest thousand, not to exceed $70,000 and not to be less than $5,000. Upon reaching age 65, a teacher's policy is reduced by 5% each year. At age 70, the amount is reduced by a maximum of $5,000. The present cost of this benefit to the local system is $3.36 for every thousand dollars of teachers' salaries annually, or from about $55.00 to $95.00 per teacher per year.

Leave Benefits: Teachers in the high and average districts receive payment, upon retirement, for any unused accumulated sick leave at the rate of 30% of the teacher's last annual salary. The low paying district also pays for accumulated sick leave, but at the rate of 10%.

Unemployment and Workers' Compensation: All three districts provide both workers' compensation and unemployment compensation programs. The cost of these plans to local districts varies. The table below summarizes these districts and their respective plans.

| District | Annual Cost of Workers' Compensation | Annual Cost of Unemployment Compensation |
|---|---|---|
| High | $35 per teacher | $60 per teacher |
| Average | $30 per teacher | $60 per teacher |
| Low | $29 per teacher | $193.42 per teacher |

Miscellaneous Local Fringe Benefits: Only the low paying district indicated that it sometimes provides reimbursement of fees for workshops that are purely discretionary.

## Louisiana

Louisiana's education system is state-oriented, with significant flexibility incorporated in it for local deviation from state rules when this favors teachers. The state's salary system is linked to a state minimum salary schedule that is frequently heavily supplemented by local districts, resulting in wide salary differentials across districts.

## Major State Fringe Benefits

Social Security and Retirement: Forty-six of the school systems in the state of Louisiana have completely withdrawn from the social security system, while the remaining twenty systems have not. Only some of the non-teaching staff in the latter systems are covered by social security. Public school teachers do not contribute toward, nor do they receive benefits from, social security regardless of whether or not their particular school has fully withdrawn from the system. Instead, Louisiana teachers become members of the Teachers' Retirement System, if they are under the age of 60, from which they receive their retirement benefits. This system provides benefits for retirement, early retirement, and disability retirement.

Louisiana teachers contribute 7% of annual earnings and the state contributes another 93% toward this retirement fund. Teachers may retire and receive maximum benefits if they are at least 60 years of age with 10 years of service, or if they have 20 years of service regardless of age. Retirement is compulsory when a member reaches age 70.

Any member who has at least 10 years of accumulated service may choose either to withdraw contributions from the system or leave contri-

butions in the system and receive defined benefits upon reaching 60 based on the number of credited years at the time of service withdrawal.

Retirement benefits are calculated on the basis of 2% times the years of creditable service (including any unused sick leave time) times the average salary of the 36 highest consecutive months, plus $300. Some members may be eligible for a 2½% formula (calculated in the same way as the 2% formula) if:

(a) the member is at least 55 and has credit for 25 years of service; or

(b) the member has credit for at least 30 years of service regardless of age; or

(c) the member is at least 65 years of age and has credit for at least 20 years of service.

The above conditions are exclusive of any unused sick leave or military service.

A number of options are available for teachers, but selection of any of these will reduce the benefit amount. These optional plans provide payment to spouses or beneficiaries or have other special features.

The Teachers' Retirement System of Louisiana provides disability payments for total and permanent disability at any age, after a teacher has served five years. If the teacher is eligible for the 2½% retirement benefit mentioned above, he or she will receive a disability allowance calculated by this 2½% retirement formula. However, if not eligible for the 2½% formula, benefits are equal to the lesser of (1) 75% of the amount that the teacher could have received, had he or she been able to teach until the age of 60, or (2) 50% of the average final compensation.

If the disabled retiree has dependent children or a disabled spouse, he or she receives an additional benefit of 50% of his or her disability benefit, though the total cannot exceed 75% of the average final compensation. If a teacher on disability dies, reaches age 60, or returns to active membership for at least three years, he or she will receive one year of service credit for each year of disability for the purpose of calculating regular retirement benefits for the member or the member's survivors.

Health and Hospitalization: The state of Louisiana appropriates an amount equal to approximately 4% of teachers' salaries for health and hospitalization coverage. The state, however, authorizes local school boards to "make contracts for group medical, surgical, and hospital benefits and services with any insurance company...legally authorized to do business in this state...[and] may agree to pay part or all of the premiums...for any such contracts out of any funds appropriated for the purpose and included in the budgets of school boards." Therefore, the amount paid for health insurance by the state and by the teacher varies widely from district to district.

Any provisions for dental, vision and auditory, and long-term disability are up to the local system.

Life Insurance: Local systems are authorized by the state of Louisiana to establish their own ccntracts with legally authorized insurance companies for life insurance policies. There is a death benefit equal to one year of salary provided by the Teachers' Retirement System; further, if a disabled teacher dies before age 60 and is still receiving disability benefits, any eligible survivors will then receive these benefits.

Leave Benefits: Public school teachers in Louisiana are allowed 10 days absence per school year with full pay. Sick leave is allowed to accumulate without limit and up to 25 days of unused sick leave can be paid for at retirement or death. Remaining unused sick leave can be used as service credit in calculating retirement benefits.

Two days of personal leave are allowed per year with full pay, but these are charged against sick leave. School boards are given the authority to grant maternity leave to school teachers for a "reasonable" amount of time before and after childbirth, though these days are also charged against sick leave. There is no provision for paternity leave.

Teachers in Louisiana are eligible for a very generous sabbatical leave program that allows for professional or cultural improvement or for rest and recuperation. A two-semester sabbatical may be taken just following any 12 or more consecutive semesters of service, or for a semester following any 6-12 semesters of service.

Teachers on sabbatical leave for professional or cultural improvement must:

(1) pursue a program of study and earn at least 10 undergraduate or six graduate credit hours or be a full time student at an institution of higher learning; or

(2) pursue a program of independent study or research; or

(3) engage in travel that is of definite educational value.

Teachers on sabbatical leave will receive (a) 50% of the minimum salary given to a beginning teacher with a bachelor's degree in that school system, or (b) the difference between the salary he or she would

have received if in active service and the amount of money that would be paid a substitute to fill in during this sabbatical leave. As an example, a teacher who would earn $20,000 the next school year in a district that pays substitutes $40 per day would be paid $12,800, which is the difference between $20,000 and the product of $40 and 180 days. Local school boards may pay additional compensation to teachers for sabbatical leaves.

Teachers on sabbatical leave are eligible for any regular salary increases. Also, persons on sabbatical leave still continue contributions to the retirement fund and this leave time counts as active service as far as this fund is concerned.

Unemployment Benefits: The state provides funding for unemployment compensation programs. The amount of money provided depends on local usage, i.e., the amount will vary from district to district.

Workers' Compensation: The maximum compensation for injuries occurring after September 1, 1977 is 66 2/3% of the average weekly wage paid in all employment subject to the Louisiana Employment Security Law, and the minimum compensation is 20%.

Other State Fringe Benefits: Up to 25 days of unused sick leave can be paid at retirement or death. This is only a state authorization; local districts must use their own funds if they choose to offer this benefit to their teachers.

## Typical Local Fringe Benefits

The state of Louisiana provides its public school teachers with many benefits such as those for retirement, leave time, workers' and unemployment compensation, and health and life insurance. Actually,

the state provides the money for health and life insurance. Establishment of types of plans is up to each local district. Three Louisiana school districts--a high, middle, and low paying--were surveyed in order to ascertain the types and the monetary value of benefits available to teachers.

Retirement: No local districts surveyed added any retirement benefits to those already available from the state.

Health and Hospitalization: No local districts surveyed added any medical benefits to those already available from the state.

Life Insurance: No local districts surveyed added any life insurance benefits to those already available from the state.

Leave Benefits: Upon retirement, the high paying district pays teachers for any accumulated sick leave, up to 25 days. The other two districts offer no reimbursement for accrued leave days. The average district only allows an accumulation of 25 sick leave days, the state minimum, and the other two districts have no limits.

The high and low paying districts allow teachers to stay on maternity leave until the teacher is released from the doctor's care. The average district allows a maximum of 25 days of leave. In all cases, maternity leave is deducted from sick leave.

All three districts allow two days of personal leave per teacher yearly. The high and average districts charge personal leave against sick leave; the low paying district does not. The low paying district simply requires teachers on personal leave to pay the cost of a substitute which, in this county, is $20.00 per day.

Unemployment and Workers' Compensation: These programs are state funded.

## Mississippi

The primary and secondary educational system in Mississippi is a traditional mixed system. The state allocates minimum foundation funds and sets a minimum salary schedule that is often supplemented by local districts. The state and local districts share payment of the employer portion of retirement contributions. Sick leave is mandated by the state, but paid for by local districts. The school year 1984-85, for which data is reported here, represents a low point for Mississipi. It should be noted that salary schedules and fringe benefits were increased significantly for the 1985-86 academic year.

### Major State Fringe Benefits

Social Security and Retirement: All Mississippi public school teachers are required to be covered by the federal social security program as well as the Mississippi Retirement System, which is mandatory for all teachers under the age of 60. This system provides benefits for retirement, early retirement, disability, and a death benefit.

The teacher, state, and local district share the costs of the two mandatory retirement systems. Teachers pay 7.05% and 6.0% of their salary, respectively, toward the social security and state retirement programs. The state allots funds to school districts to pay the employer portion of social security, 7.05%. The employer contribution for state retirement is a total of 8.75%, 7.25% from the state and 1.50% from the district.

Full benefits are received if teachers retire at age 65 or if they have credit for 30 years of service, regardless of age. If a teacher reaches age 60 and has at least 10 years of service credit,

he or she may also retire, but at a reduced benefit. A teacher becomes vested in the system after ten years of service and, upon leaving covered employment without 30 years of service or without reaching age 60 for early retirement, may decide to withdraw teacher contributions and accumulated interest or defer the retirement benefit to begin at age 60.

Retirement benefits in Mississippi are calculated using three factors: (1) member's age; (2) years of service credit; and (3) maximum annual salary (based on the average of the five highest consecutive years of earnings). The member receives a benefit of 1 5/8% of the average compensation for each year of service less than or equal to 20 years, 1 3/4% of average compensation for service years exceeding 20 but less than or equal to 30, and 2% of average compensation for each year of service greater than 30 years. This benefit is reduced at the rate of 3% for each year the member is under 65, unless he or she has 30 years service credit. There will also be a reduction in benefits if the teacher selects an optional plan. These optional plans will pay to spouses, beneficiaries, or have other special features.

After retirement, a teacher may resume employment for a period of not more than 120 days or earn 25% of average salary and still receive all retirement benefits to which the teacher normally would be entitled. If the teacher returns to full time or regular employment, benefits will cease until the employee again retires. While employed for the second time, contributions to the retirement system would resume and these contributions would be used to recalculate a monthly benefit after retirement.

Since 1984, retiring members of the Mississippi Retirement System receive cost of living adjustments equal to the annual percentage change in the Consumer Price Index up to 2½%.

A teacher receives one year of service credit for each 10 months of service (177 days average). Service credit for military service may be obtained up to a maximum of 4 years. Out-of-state service credit may be purchased, provided the teacher has at least 5 years of Mississippi service credit upon retirement. Up to two years credit for every 10 years of Mississippi public school service may be purchased for any professional leave time.

Teachers are eligible for disability retirement if they become permanently and totally disabled and have at least 10 years of service credit. These payments are calculated just as are benefits for service retirement.

Health and Hospitalization: The State of Mississippi has a state-wide health plan, but does not directly pay any portion of the cost of this program for teachers. They do encourage local districts to pay for health benefits for teachers by offering to give any district $175 per teacher for any supportive, non-insurance expenditure purpose, if the district will spend $250 per certified teacher for group health and/or life insurance. The law is quite specific, saying "It is the intent of the Legislature that no state funds shall be used for the purchase of such group health and/or life insurance."

Life Insurance: The cost of participation in the state life insurance plan is entirely borne by teachers or local districts, not the state.

Leave Benefits: Teachers in Mississippi must be allowed seven days of sick leave per year by law and may accumulate up to 30 days. Local districts may allow more days per year and/or more days accumulation.

Two days of personal leave are also allowed by the state and are not charged against sick leave. A form of extended sick leave is available for ten days after accumulated sick leave has been exhausted. For those ten days, only the established district substitute rate may be deducted from teachers' pay. Thereafter, full pay may be withheld for continued absence. No special provision for maternity or paternity leave is provided by the state, and there is no provision for sabbatical leave.

Unemployment Benefits: The state of Mississippi does not provide unemployment benefits for teachers; however, some local districts do provide such funds.

Worker's Compensation: Mississippi does not contribute to a worker's compensation program but, as with unemployment benefits, local districts may contribute to such pools.

Other State Fringe Benefits: Teachers are allowed to receive retirement service credit for any unused sick leave up to 77 days.

State Fringe Costs: Teachers are required by the state of Mississippi to receive six semester hours of college credit every five years to continue their employment, i.e., maintain their certification. The State has no program to pay or subsidize these required expenses.

## Typical Local Fringe Benefits

Three local Mississippi school districts--a high paying, middle paying, and a low paying district--were surveyed in order to determine what separate benefits, if any, they provided for their public school teachers. Those benefits are described below.

Retirement: The local systems all contribute 1.5% of annual salaries to the state retirement plan for each teacher.

Unemployment and Workers' Compensation: The high paying Mississippi district has an unemployment compensation plan, but no workers' compensation. Unemployment compensation and workers' compensation programs are both provided by the middle paying district. The cost of each is $32.00 and 2% of annual salary for workers' compensation and unemployment compensation, respectively. The low paying district offered neither of these benefits.

Health, Hospitalization, and Life Insurance: The state of Mississippi provides each district that spends at least $250 of its own money for health and life insurance for teachers an additional $175.00 for use in other areas. None of this state money is to be used for insurance purchases. However, none of the districts included in this survey reported providing any extra health and or life insurance for teachers.

Leave Benefits: The high paying district adds two more sick days plus one unused personal leave day to the state minimum of seven, making a total of ten days. Any unused portion of these ten days may be accumulated without limit.

The middle paying district allows nine days of sick leave and teachers may accumulate up to 40 unused days. Teachers are allowed one personal leave day per year and may accumulate up to three days.

Seven days of sick leave are allowed teachers in the low paying district which is equal to the state minimum. They may accumulate up to 30 days, and they also receive two days of personal leave per year.

## Miscellaneous Fringe Benefits

Teachers in the high paying district are reimbursed for science and math courses that satisfy recertification requirements.

Teachers in one of the other districts are eligible for "free hours" at a university in Mississippi through a program in which university students observe classes in county schools. By participating in this program, the district receives an allotment of free hours.

Though insurance benefits are employee paid, the high paying district has at least established a payroll deduction procedure which enables contributions to be made on a tax-sheltered basis.

## North Carolina

North Carolina's is a very state-oriented school system. The minimum salary schedule, with funds supplied by the state, is significant and only slightly augmented by most local districts. Further, locally provided fringe benefits are relatively minor.

### Major State Fringe Benefits

Social Security and Retirement: All public school teachers in North Carolina are required to be members of the federal social security system. The state pays the employer matching portion of the contribution which is 7.05% of teacher salaries. Teachers in North Carolina are also required to become members of the Teacher's Retirement System (TRS). This system provides benefits for retirement, early retirement, benefits for total and permanent disabilities, and survivor benefits. Retirement benefits are not subject to North Carolina state income taxes. However, contributions made after July 1, 1982 are subject to federal income tax. Teachers contribute 7.1% of their monthly salary to the retirement system while the state contributes 11.07%. Teachers may retire and receive full benefits if they are at least 65 years of age or have credit for at least 30 years of service regardless of age. Teachers are eligible for early retirement at a reduced benefit if they have reached age 50 and have 20 years of service or if they have reached age 60 and have 5 years of service. The following table shows early retirement benefit percentages:

| Age at Early Retirement | Percent of Maximum Benefit Received |
|---|---|
| 50 | 42% |
| 51 | 45% |
| 52 | 48% |
| 53 | 51% |
| 54 | 55% |
| 55 | 59% |
| 56 | 63% |
| 57 | 68% |
| 58 | 73% |
| 59 | 79% |
| 60 | 85% |
| 61 | 88% |
| 62 | 91% |
| 63 | 94% |
| 64 | 97% |

The percentage of benefit received drops by 3% per year as a penalty for each year between the ages of 60 to 65 that a teacher takes early retirement. From age 57-59, the penalty is set at 6%; from age 55-56, the penalty rate is 5%; from age 52-54, the penalty decreases to 4%; and from ages 50 to 52, the penalty rate becomes 3%.

After five years of service, the teacher is vested in the system. A teacher may, at any time or age after becoming vested, leave the system and will receive benefits based on average final salary and years of public school service. The benefits will begin after the vested member reaches 60; they may also begin at a reduced benefit if the member is at least 50 and has 20 or more years service credit. If the teacher leaves the system before becoming vested, he or she will only receive a refund of contributions plus accrued interest.

Retirement Benefit Amount: The retirement benefit amount is based on highest average salary and years of service credit earned. To determine the highest average salary, the salaries of the four consecutive

highest salary years are averaged; this is then multiplied by 1.57% and then by years of service credit to get annual total benefit. As mentioned above, this benefit will be reduced by early retirement. Selection of an optional plan will also cause a decrease in benefits. These optional plans provide benefits that pay to spouses or other survivors or have other special features.

A retired teacher may return to employment by the state on a temporary or part-time status and still receive all retirement benefits. However, if a teacher returns to full employment, benefits will cease after six months and the teacher will again become a contributing member of the retirement system. Upon second retirement, benefits will resume and be increased due to the additional contribution.

Teachers receive one year of retirement credit for each 180 day school year completed.

A teacher may receive credit for active duty military service at no cost if, at the time of enlistment, he or she is a public school teacher. The teacher receives such credit at no cost if he or she returns to teaching within two years after military service discharge or if he or she, at some time, completes ten years of public school service subsequent to leaving the military.

Credit for out-of-state service may be purchased after a member has accrued 10 years of North Carolina public school service. The teacher is allowed to purchase one year of out-of-state service for every two years of North Carolina service, up to a maximum of ten years.

Teachers may receive disability retirement benefits if they become totally and permanently disabled and have at least five years of North

Carolina service credit. Benefits for disability retirement are determined in the same way that regular retirement benefits are computed.

Health and Hospitalization: Electronic Data Systems Federal Corporation administers a group plan for public school teachers in North Carolina that covers hospital and medical expenses. The state provides all contributions for the basic coverage under this health plan. The contribution by the state is approximately $577 per year per teacher. The state plan makes no provision for dental, vision, or auditory care.

Long-term disability insurance is provided by the Teachers' Retirement System and provides up to 60% of a disabled teacher's monthly salary up to a maximum of $1,000 per month. In order to qualify, the teacher must have credit for one year of service. Ninety-one days after the disability occurs, the teacher is eligible to begin receiving benefits.

Life Insurance: Though North Carolina has no separate life insurance program, teachers are covered (after one year of service) under the Teacher's Retirement System by a death benefit. The beneficiary will receive, upon the death of the teacher, a benefit equal to the deceased employee's previous twelve month's salary, up to a maximum of $20,000.

Leave Benefits: North Carolina public school teachers have a very generous total leave package. With regard to sick leave, teachers accrue one day per month of active service. Sick leave may be accumulated without limit. Teachers are also provided with a 20 day extended sick leave period for personal illness. This leave can only be used if all accumulated sick leave has been exhausted. The teacher

will receive, during this time, his or her regular pay minus the cost of a substitute. These sick days are not allowed to accrue.

Teachers receive 2 days of personal leave per year and, though personal leave days taken are not charged against sick leave, teachers are required to pay the cost of a substitute for these days. Teachers are allowed to accumulate up to 5 days of personal leave.

Sick leave must be used for maternity leave in North Carolina. However, any public school employee, male or female, may be granted up to one full year of leave (without pay) upon the birth or adoption of a child.

Though North Carolina makes no provision for sabbatical leave, teachers do earn vacation leave each year, a very unusual benefit for regular classroom teachers. The amount of vacation leave earned per month increases as years of service increase. The following is the vacation leave schedule for teachers:

| Years of Service | Days of Vacation Leave Per Year |
|---|---|
| Less than 2 years | 10 |
| 2 but less than 5 years | 11½ |
| 5 but less than 10 years | 14 |
| 10 but less than 15 years | 16½ |
| 15 but less than 20 years | 19 |
| 20 or more years | 21½ |

Teachers may accumulate vacation leave and may accumulate a maximum of 30 days of vacation time. The importance of this leave and the fact that teachers are encouraged to take annual leave each year are indicated in this excerpt from the North Carolina Administrative Code:

.0106 ANNUAL VACATION LEAVE - **PUBLIC SCHOOL EMPLOYEES**
(a) Policy Applicable to All Employees.
(1) Purpose and Uses. The primary purpose of paid vacation is to allow and encourage all employees to renew their physical and mental capabilities and to remain a fully productive employee. **Employees are encouraged to request leave** during each year in order to achieve this purpose. [Emphasis added.]

Unemployment and Worker's Compensation: Teachers in North Carolina are entitled to unemployment and worker's compensation. The state annually appropriates funds as needed for these programs.

Other State Fringe Benefits: The state makes a contribution of $50.00 per certified teacher to help pay for required continuing education and local districts may also provide funding.

Another fringe benefit is that of longevity pay. Teachers in the state of North Carolina, after completing 10 years of service, qualify for longevity pay. This annual payment is based on the number of years of service credit and it increases as length of service increases. The following table shows how longevity pay is determined:

| Year of Service | Longevity Pay Rate as Percent of Salary |
|---|---|
| 10 but less than 15 years | 1.50% |
| 15 but less than 20 years | 2.25% |
| 20 but less than 25 years | 3.25% |
| 25 or more years | 4.50% |

## Typical Local Fringe Benefits

Most of the fringe benefits for public school teachers in North Carolina are paid for by the state. State-provided benefits include retirement, social security, basic health insurance, leave benefits, and unemployment/workers' compensation. Local school systems may supply teachers with additional benefits which vary across districts. Three local districts were again selected, one each from the low, medium, and high paying groups of districts in North Carolina, to obtain information about locally provided benefits.

Retirement: The state of North Carolina provides teachers with a retirement plan. No district surveyed offers any extra retirement benefits at this time, though one district had an attractive supplemental program that was discontinued after 1971.

Health and Life Insurance: Dental insurance is available for teachers in the high paying district. The cost to the local system for this coverage is $8.84 per teacher monthly. The district representing the middle group in North Carolina pays the teacher's share of the cost of the basic state health plan. The monthly cost to this district for this benefit is $48.05 per teacher.

The high paying district pays for term life insurance for teachers in the amount of ½ of the employee's annual salary. The cost for this life insurance is $26.30 per teacher annually.

Leave Benefits: No extra leave benefits are provided by the local districts surveyed.

Unemployment and Workers' Compensation: The state reimburses local districts for any annual expenditure for either workers' compensa-

tion or unemployment compensation. There are no added benefits of this type among the local North Carolina districts surveyed.

Miscellaneous Local Fringe Benefits: If funds are available, the high paying district provides teachers with funding for courses and workshops that satisfy recertification requirements.

The middle paying district offers free workshops for employees. The funds for these workshops come from local staff development monies.

## South Carolina

The compensation system in South Carolina is a typical, mixed state and local system in which the state provides the majority of salary and fringe benefits for classroom teachers, with local districts supplementing state compensation. A description of these local supplements will be given at the end of this section.

### Major State Fringe Benefits

Social Security and Retirement: All public school teachers in South Carolina must be covered by the federal social security program. Teacher contributions for 1985 are 7.05 percent of salary (on the first $39,500 of salary) and the state pays an equal amount.

Enrollment in the South Carolina Retirement System is mandatory for all public school teachers in the state and is available for city, county, and other local employees. It provides a complete schedule of benefits for retirement, early retirement, and disability protection to complement social security. It further provides the equivalent of life insurance benefits.

Teacher contributions for retirement are the sum of four percent of the first $4,800 of salary and six percent of the remaining annual earnings. The state contributes seven percent of annual earnings. The state also contributes another three-tenths of a percent of annual earnings to provide a death benefit discussed below under life insurance. Teacher contributions are not subject to federal tax until retirement or unless withdrawn from the system, but these contribution are not tax deferred with respect to state and local income taxes.

Retirement benefits at full formula amounts may begin when a teacher either reaches age 65 or completes 30 years of service (regardless of age). Early retirement may begin at age 60 if the teacher does not have thirty years service, and the retirement amount will be reduced by five percent for each year the teacher is under age 65. After five years of service, the teacher is vested in the system and, upon leaving covered employment without 30 years of service or without reaching age 60 for early retirement, may elect to withdraw teacher contributions with accumulated interest or defer the retirement allowance to begin at age 60.

The retirement benefit amount is based on a period of highest average salary and length of service. Highest average salary is the average of the three highest consecutive fiscal year earnings on which contributions to the retirement system were made. The first $4,800 of the highest average salary is multiplied by 1.25% and the remainder is multiplied by 1.65%. The sum of these two products is then multiplied by the number of years and fraction thereof by early retirement (as noted above), and/or by selection of a number of early retirement benefit plans that pay to spouses, other beneficiaries, or have other special features. Otherwise, the amount determined above is paid to the retired teacher for life. There is no earnings limit after retirement to continue receiving benefits if the retired teacher works for a private employer or a public employer not covered by the South Carolina retirement system. If the retired teacher returns to covered employment, benefits cease for the fiscal year as soon as $7,000 is earned.

If the Consumer Price Index (CPI) increases by three percent or more from one December to the next December, then retirement benefits are increased four percent at the beginning of that fiscal year. If the CPI increase is less than three percent, the increase in retirement benefits for the fiscal year will be equal to the actual percentage increase in the CPI. It should be noted that the South Carolina General Assembly frequently appropriates funds for retirement benefit increases from the General Fund, apart from partial cost of living adjustment. (For example, in November of 1984 an additional two percent increase in benefits was granted to South Carolina retirees.)

Teachers receive one year of retirement credit for each full 190-day school year completed. Service credit for teaching in public school systems in other states may be purchased for ten percent of the teacher's current salary as long as contributions to the other systems have been withdrawn. Credit for federal service may also be purchased under the same conditions. Credit for private school service cannot be purchased, but credit for substitute teaching in South Carolina public schools may be purchased for four percent of the teacher's current salary with the state providing a matching amount.

Teachers who are vested in the retirement system (five years of service) and become permanently and totally disabled will begin to receive a disability benefit amount for life. The benefit amount is calculated as retirement benefits above, where the highest average salary is the average of the highest three consecutive years of salary and length of service includes the years the teacher would have worked had the teacher continued to work to age 65. Disability payments continue even if the disability payments are less than the amount earned

prior to the disability. If total earnings are equal to or greater than prior earnings, the disability benefit ceases.

Health and Hospitalization: Public school teachers are covered for medical and hospital costs under the state's Health Insurance Program. The current carrier is Blue Cross and Blue Shield of South Carolina. The state provides the individual teacher a standard or basic plan at no cost to the teacher. The cost to the state of this standard policy is $61.46 per month or $737.52 annually. Expanded coverage beyond the standard plan is available to the teacher as well as coverage for dependents at full cost to the teacher.

Teachers who retire may continue their health plan coverage with the state continuing to pay all (or its portion of) expanded coverage if the teacher retires with 20 years of service. Teachers who terminate for other reasons but are eligible for retirement benefits and have at least 10 years of service can continue health coverage with state-funded benefits. Termination with 5 to 10 years service allows the teacher to continue health coverage in the plan at full cost to the teacher. Teachers who terminate with less than 5 years of service cannot continue coverage.

In February of 1985, dental care was added as a separate component of the health insurance package available to teachers. Again, the state pays the full cost of the individual teacher's coverage, with dependent benefits at full cost to the teacher. The cost to the state for the individual teacher's coverage is $9.15 per month or $109.80 annually.

South Carolina does not offer any separate or specific benefits for vision or auditory care to its teachers.

In addition to the retirement disability benefits described above, public school teachers are guaranteed a maximum disability benefit of 62.5 percent of their current salary under long term disability, not to exceed $800 per month. The state pays the entire cost of this insurance in the amount of $2.55 per month or $30.60 annually.

Life Insurance: The state provides a simple $3,000 life insurance policy for all teachers paid by the state. The cost to the state is $.70 per month or $8.40 annually. In addition, the state provides each teacher with a death benefit to a designated beneficiary equal to one year's salary, after one year of service (unless the death results from a job-related injury). The state pays the entire cost of this life insurance by paying .3 percent of the teacher's salary each year into the retirement system which invests the funds and pays the benefits. Other optional group life insurance programs are available for teachers at full cost to the teacher.

Leave Benefits: Public school teachers in South Carolina accrue sick leave on the basis of one and one-fourth days for each month of active service or twelve days for nine months of active service. Unused sick leave may be accumulated from year to year up to 90 days, provided that such accumulation does not violate the teacher's contract with the local school district that has more liberal sick leave provisions. Accrued sick leave is transferable across school districts in the state. No separate personal leave days are provided by the state, nor is there any special provision for maternity or paternity leave. Maternity leave is charged against sick leave.

Finally, no sabbatical leave is provided by the state.

Unemployment Benefits: Teachers in South Carolina are covered under an unemployment compensation program which provides some continuation of salary should a teacher become involuntarily unemployed. The cost to the state for each teacher is .4 percent of each teacher's salary annually.

Workers' Compensation: Teachers in South Carolina are covered under a workers' compensation plan for work related injuries. The state's cost per teacher is again about .4 percent of annual salary.

Other State Fringe Benefits: The primary minor fringe benefit in South Carolina is new for 1984-85. The state will now reimburse teachers for courses taken which count toward recertification if the teachers are located in a rural area or teach in a field where there is a critical need for teachers.

## Typical Local Fringe Benefits

Almost all fringe benefits for South Carolina public school teachers are paid for by state contributions. Judging by the three districts--a high paying, a middle paying, and a low paying district--surveyed in order to determine the nature of local benefits, there appear to be few benefits provided at the local district level.

Retirement: No local districts surveyed in South Carolina offered any additional retirement benefits.

Health and Hospitalization: No local districts surveyed in South Carolina offered any additional medical benefit.

Life Insurance: The low paying district provides a life insurance policy to each employee (term life) in the amount of $1,000.00. The annual cost to the district for this benefit is $4.20 per teacher.

Leave Benefits: Two districts allow teachers three personal days annually, but these are charged against sick leave when used. The low paying district allows teachers one day of personal leave which is also charged against sick leave.

Unemployment and Workers' Compensation: All three districts have workers' and unemployment compensation plans, but the state specifically allocates funds to local districts to be used for these programs.

Miscellaneous Fringe Benefits: Sometimes teachers in the middle paying district are reimbursed for fees for recertification workshops and discretionary workshops. Teachers in the high paying district get partial reimbursement for courses taken toward advanced degrees. Reimbursement in this case comes through a local foundation that helps schools in that district.

## Tennessee

The state of Tennessee allocates money to local school districts based on "service delivered" or a certain amount for each pupil plus different amounts for vocational education and handicapped programs.

## Major State Fringe Benfits

Social Security and Retirement: Teachers in the state of Tennessee are required to contribute 7.05% of their annual salaries to social security. The state contributes the employer matching portion.

Public school teachers in Tennessee are also required to become members of the Tennessee Consolidated Retirement System (TCRS). This system provides teachers with benefits for service retirement, early retirement, disability retirement, and survivorship. Teachers' contributions to the TCRS are 5% of annual salary and the state's contribution is 15.03% of annual salary.

Full service retirement benefits are available for 30 years of service or after a vested member reaches age 60. Members become vested in the system after 10 years of service and are eligible for early retirement if they are at least 55 but less than 60, or if they have 25 years of service credit but have not yet reached 55. If the member chooses to retire early, the benefit will be reduced by 0.4% for each month by which the teacher's early retirement comes before full service retirement.

A full year of credit toward retirement is received for every school year a teacher completes. A member may receive credit toward the TCRS for prior military service if he or she qualifies; he or she may also recieve credit for prior school service after making the required contributions plus interest.

Upon retirement, a teacher may use any accumulated sick leave as credit toward the TCRS. A minimum of one month of credit will be given for every 20 days of unused sick leave the teacher possesses.

To determine a retiree's monthly benefit, three factors are used: the member's average final compensation (AFC), years of creditable service, and the social security integration level (SSIL). The member's benefit is not to exceed 75% of the member's AFC. To determine the AFC, the member's five highest consecutive salaries are averaged. The SSIV is an average of social security wage bases and is $13,800 for 1985. To find the annual maximum benefit, 1.5% is multiplied by years of creditable service and AFC. Then, an amount is added if the AFC exceeds SSIL. The added amount is equal to .25% times the difference between AFC and SSIL. The idea here is that social security retirement payments, relative to current or final earnings, are weighted towards lower income earners. Hence, this formula is intended to offset that advantage of lower income earners by slightly boosting state teacher retirement benefits based on earnings above the average social security maximum wage bases over the past. The attempt is to help "integrate" the two retirement plans so that about the same <u>percentage</u> of final income is replaced at retirement, whether a teacher has been a lower or higher earner in the system.

If a member becomes permanently and totally disabled before reaching retirement age, he or she can receive disability retirement. The disability may be either physical or mental and must be medically certified. The member must also have had at least five years of service credit to be eligible. The retiree will receive a monthly benefit equal to 90% of the retirement benefit that the member would normally

have received. The number of additional years of credit the member would have received had he or she been able to work until age 60 may be added to the teacher's creditable years if service credit is less than 20 years. However, unless the member's service credit at the time of disability retirement is greater than 20 years, this total shall not exceed 20 years.

If a teacher becomes totally and permanently disabled as the result of an accident or violence against him or her while in the performance of duty, he or she is eligible for accidental disability. The benefit for such retirement is 50% of the AFC, or 33.3% of the AFC if the member also receives a social security disability benefit. Upon retirement, the benefit is reduced to 1/3 of the AFC.

After a teacher has been retired for at least one year, he or she is eligible for a retirement allowance adjustment based on any change in the Consumer Price Index. Retirees will receive any increase or decrease in monthly benefit in accordance with the CPI up to a 3% change either way.

Health and Hospitalization Insurance: As of now there is no state health insurance plan but Tennessee will provide coverage beginning January, 1986. Local systems and teachers fund any current health benefits.

Leave Benefits: The state allows a minimum of one day of sick leave per month and local districts may provide teachers with more leave days. Sick leave days are allowed to accumulate without limit from year to year. Teachers are allowed two days per year for personal leave but local districts may provide teachers with more. Teachers on personal leave do not have to pay for a substitute and leave days are not charged against sick leave.

Tennessee makes no special provisions for maternity, paternity, or sabbatical leave.

Unemployment Compensation: This benefit is provided locally, not by the state.

Workers' Compensation: As with unemployment compensation, workers' compensation is not provided by the state.

Other State Fringe Benefits: As mentioned above, money for college coursework may be provided by the state. Another fringe benefit is the ability to use any accumulated sick leave for credit toward retirement. Teachers receive one month of retirement credit for every 20 days of unused sick leave.

## Typical Local Fringe Benefits

Funds for teachers' fringe benefits are provided by the state of Tennessee for local school districts based on service delivered in the form of a certain amount for each pupil. The state also provides funds for vocational education and handicapped programs for county schools. Described below are the typical benefits provided by three local school systems that represent the high paying, middle paying, and low paying groups of school districts in Tennessee.

Retirement: None of the districts surveyed offered any extra retirement benefits.

Health and Hospitalization: All three districts surveyed provide health and hospitalization insurance for their teachers. The high paying district offers 100% coverage of the usual and customary expenses for hospitalization and physician, as well as coverage for mental health problems and catastrophic illness. This policy has a $250,000 maximum

and a $100 deductible on major medical expenses only. For this type of coverage, the high paying district pays about $250 per teacher annually.

The district from the middle group receives medical coverage through Blue Cross and Blue Shield. This county pays $708.60 per teacher for each 10 month period for basic, individual coverage. Only $200 per year is spent by the representative low paying district on each teacher for health coverage.

Of the three districts included in the survey, only the high paying district offers life insurance to its employees. The cost to the district is $27.50 per teacher per year for a $25,000 term life benefit.

Leave Benefits: Tennessee allows one day of sick leave per month but local districts may increase this amount if they choose to do so. Only the high paying Tennessee district takes advantage of this authority, allowing 1.25 days of sick leave per month. The high paying district also allows up to one year of maternity leave (without pay) and provides for a possible extension. The representative middle district allows teachers to use any or all of their sick leave as maternity leave, while the district in the low paying group allows only 30 days of maternity leave to be charged against sick leave.

Unemployment and Workers' Compensation: The representative high paying district in Tennessee offers teachers both an unemployment compensation and a workers' compensation program. Approximately $31 per teacher is spent annually for workers' compensation by this district and about $17.50 per teacher for unemployment compensation.

The middle district provides a workers' compensation pool for teachers. The cost annually for this program is $48.00 per teacher. Teachers in this district also receive unemployment compensation that costs the local system annually the actual amount that teachers in that district receive in any given year.

The low paying district offers no workers' compensation plan but does indicate it spends about $63.00 annually per teacher on unemployment compensation.

Tennessee allows teachers a minimum of two days for personal leave and the average and low paying districts allow only this minimum amount. However, the high paying district allows seven personal leave days; three personal, two religious, and two for the death of a close friend or distant relative. In no district are personal leave days charged against sick leave nor are teachers required to pay the cost of a substitute while on personal leave.

Sabbatical leave is provided by the high and middle paying districts. The high paying district allows sabbatical leave to eligible teachers and guarantees their position plus a two step advancement on the salary index. Three teachers were on full sabbatical leave in 1984-85. The middle district allows two days per year of non-cumulative sabbatical leave, or what might be better termed "professional leave" in this case.

Miscellaneous Local Fringe Benefits: The high paying district reimburses teachers for college courses and workshops that have to be taken in order to meet recertification requirements. In addition, teachers also receive funds for college courses taken at the discretion of the teacher, but not for discretionary workshops. This district

also provides paid professional leave to attend professional meetings on a case-by-case basis. Expenses may be full or partially reimbursed, as well.

## Virginia

Virginia's is a state-funded, but locally-oriented system. A set amount per pupil, $1,605 in 1984-85, is allocated to support 54 teachers per one thousand pupils. Higher salaries for these "state authorized" teachers or full salaries for extra teachers must come from local funds. The state appropriates specific amounts in lump sum for local districts to pay various fringe benefits for authorized teachers.

## Major State Fringe Benefits

Social Security and Retirement: Public school teachers in Virginia are members of the federal social security system. Teacher contributions toward this system are 7.05% of salary with the state providing the funds for an equal amount to be paid by localities for the 54 teachers per thousand pupils. The local districts must pay all fringe benefits for any extra teachers they hire.*

All state employees are also required, as a condition of employment, to become members of the Virginia Supplemental Retirement System (VSRS). This system provides benefits for full retirement as well as for early retirement, disability retirement, life insurance coverage, and survivorship.

Employee contributions to the system are 5% of annual salary. Employer contributions are based on the total payroll and the rate, adjusted every two years, is 11.15 percent for 1984-85.

Members with at least 30 years of service credit may retire upon reaching age 60 at full formula amounts. Members who are age 65 or older may retire and receive full benefits regardless of amount of

service credit. Teachers may also retire early, with a reduction in benefits, if they are at least 55 and have 5 or more years of service credit. To determine this reduction, the number of months between the member's regular retirement date and the date he or she would be eligible for early retirement is calculated. A reduction of one-half percent is applied for every month up to and including the sixtieth month. If the member's "early retirement months" exceed 60, a reduction of four-tenths of one percent is applied to these additional months.

Members of the VSRS become vested after 5 years of service. After becoming vested, a member may apply for early retirement, disability retirement, may leave the system and withdraw contributions, or may elect to begin receiving benefits at age 55.

Teachers in Virginia hired on or after April 1, 1980 are covered under the "rule of 90." According to this rule, teachers may retire with full benefits if they are at least 55 years of age, have at least 30 years of service credit and, when added, the years of age and service are greater than or equal to 90. Once a teacher reaches age 70, retirement is mandatory.

The retirement benefit amount is based on average final compensation, years of service, and age. Average final compensation (AFC) is the average of the three highest salary years. If the AFC is greater than or equal to $13,200 (the usual case), then the maximum retirement benefit is equal to the product of years of service, a factor of 1.65 percent, and AFC less $1,200. In other words, maximum annual benefits = years of service x .0165 x (AFC-$1,200).

A teacher may obtain employment after retirement and still receive benefits from the VSRS, but only if the place of employment does not provide employee retirement coverage through the VSRS.

Retirees do receive increases in benefits due to increases in the cost of living after two years of retirement, and yearly thereafter. This increase is based on the consumer price index (CPI). The retiree will receive the full amount of the first 3 percent increase in the CPI and one-half of any increase from 3 to 7 percent.

Teachers receive one year of service credit for every school year they work, and members may purchase credit for out-of-state service and military service. The cost of such service credit to the teacher is 15 percent of either their current salary, average creditable compensation, or the salary as of the last date in service, whichever is the highest.

If a vested member of the VSRS becomes mentally or physically disabled and this disability is likely to be permanent, he or she is eligible for disability retirement provided he or she is under the age of 65. Benefits for disability retirement are calculated just as are the basic benefits for service retirement.

If a Virginia public school teacher dies before retirement, the designated beneficiary can receive an actuarial benefit or contributions plus interest if the member is 55 and vested in the system, is age 60 regardless of amount of service, or has at least 30 years of service credit regardless of age.

Health and Hospitalization: No state medical plan is offered by Virginia.

Life Insurance: Besides death benefits available through the retirement system, Virginia offers a strong, mandatory group life insurance plan. The state appropriates specific funds to pay the employer portion of this shared-cost plan. The primary benefits are (1) life insurance at two times salary, (2) double this amount for accidental death, and (3) dismemberment insurance. The cost to teachers is $7.20 annually per thousand dollars of insurance.

Leave Benefits: The state requires that teachers have at least one day per month of sick leave. Most leave policies are left to local districts and are noted below.

Unemployment and Workers' Compensation: These benefits are not state responsibilities.

Other State Fringe Benefits: Virginia public school teachers are required to take certain courses in order to maintain certification. The state of Virginia does not normally provide teachers with the funds for such courses; however, it does offer Mathematics/Science Scholarships/Loans to college students at or beyond the junior level. Eligible students may receive up to $2,000 scholarship/loan money that is forgiveable by teaching for a certain period of time. This is the only kind of funding provided by the state, but local districts dc often provide money for certification costs.

Typical Local Fringe Benefits

Because the Virginia education system is so locally oriented, as opposed to the state orientation of many systems, such as those in North Carolina and Louisiana, six local districts were studied rather

than the usual three. The sample was stratified, containing two high paying districts, two in the middle, and two relatively low paying districts.

Retirement: Two of the six districts surveyed reported that they paid the teacher's share of contributions toward the retirement system which amounts to 5 percent of the teacher's annual salary. This, of course, is a major local benefit. In addition to coverage by the VSRS, all teachers within one of the school districts are automatically members of a generous local retirement system. The district pays two percent of salaries for this retirement prcgram; teachers themselves make no contributions to this system.

This retirement system provides full additional benefits for retirement at age 60 with 30 or more years of service credit, retirement at age 62 with 5 or more years of service credit, and disability retirement with 10 or more years of service credit. Also provided are survivorship benefits as well as reduced benefits for early retirement at age 55. Members are vested in this system after 5 years.

Another county provides public school teachers with an early retirement plan if the employee has 15 years of service credit, 20 years of coverage under the VSRS, and is between 55 and 65 years of age. The amount of this beneift is equal to 20% of the final salary, and teachers may receive this benefit for up to seven years.

A suburban county offers a retirement plan for educational employees that provides benefits, in addition to those provided by VSRS and social security, for disability retirement, service retirement, early retirement, and survivorship. These benefits become available when the

teacher reaches age 55 and has 25 or more years of service credit or when the teacher reaches age 65 with 5 or more years of service.

The formula for calculating full service benefits is as follows:

| Average Salary for 3 highest years | × | 2% | × | Years of Service | = | Service Benefit |
|---|---|---|---|---|---|---|

After age 65, the above benefit is reduced using the following formula.

| [Avg. salary for 5 highest years − $1,200] | × | 1.65% | × | Years of Service | = | Service Benefit |
|---|---|---|---|---|---|---|

Credit for out-of-state and military service may be purchased. Vesting in this system occurs after five years of service. A vested member, if he or she becomes permanently and totally disabled, is eligible for disability retirement. The member will be eligible to receive credit for the number of service years he or she would have received had he or she retired normally.

Medical and Health Insurance: Though the state does not provide health insurance for teachers, local districts do provide such coverage. One suburban county provides its employees medical insurance coverage through four separate companies, with each emphasizing different plans with varying total costs. The portion paid by the local district for individual coverage is constant at about $72 per month in each case or $864 annually. Family coverage can be purchased at additional cost to both the the employer and employee. Higher option plans may also be purchased at extra cost to the teacher.

In another Virginia county, a single plan through Blue Cross and Blue Shield coverage for teachers is available. The annual cost to the teacher for basic coverage is $266.64 per year, and the cost to the local district is about $660 per year.

Health insurance coverage in another county is provided for by Blue Cross and Blue Shield along with two other companies. The cost to the teacher for an individual, basic health plan is $61.80 per year,and the cost to the local system is $1173.72 per year per teacher. Higher option plans may be chosen by the teacher for which the local district pays none of the extra cost.

No district provided any employer-paid coverage for dental, vision, or auditory care.

Two of the six Virginia counties studied have long term disability insurance plans that provide teachers with benefits if they become totally disabled due to sickness or accident. Benefits may be received after 90 days of total disability, in one case, and 30 days in the other. The benefit under both plans is in the amount of two-thirds of the basic monthly salary, subject to a $3,000 maximum and minus any benefits that may be received from other sources such as workers' compensation, retirement plans, and social security. Benefits may be received until the teacher reaches age 65.

In the two school districts having disability plans, about one third of the cost of long-term disability premiums is paid by the districts, which amounts to about $101.87 per year per teacher.

Life Insurance: As noted above, the state of Virginia provides its public school teachers with mandatory, share-cost life insurance coverage in an amount equal to twice the annual salary. No district has any extra life insurance plan.

Leave Benefits: Five school districts allow teachers one day of sick leave per month, the state required minimum. These days accrue

from year to year with no limit in three districts and with limits of 120 days and 190 days in two districts. The sixth district allows its teachers 12 days of sick leave per year with no limit on accrual.

All counties, except one, allow teachers to "sell" any unused leave back to the district. Two of the districts pay $10 per day of unused sick leave, one pays 10% of the daily salary for each unused sick day, and two other districts pay half of the daily rate for each day of unused sick leave.

Three of the six districts surveyed allow three days of personal leave per year, while the other three districts allow two days. These days are not charged against sick leave and teachers are not required to pay a substitute when on personal leave.

In four of the surveyed counties, there was no local provision for maternity leave. Any time off due to pregnancy comes directly from sick leave days. The two remaining counties also require maternity leave days to come from sick leave; however, they allow time off for either parent without pay for an extended period of time. Other districts may also provide the same benefit. However, if they do, no mention was made in any information provided.

Two of the local districts provide sabbatical leave programs for their teachers. This benefit amounts to ½ of the annual salary for a year of sabbatical leave.

Unemployment Compensation: There is a Virginia state plan for unemployment compensation with the cost paid from local funds. The districts indicated a range of annual costs of .01 percent of annual salary (about $2.00) to $75.00 per year per teacher.

Workers' Compensation: Funding for workers' compensation varies from district to district; typical contributions range from one percent of salaries (or some $180) to $30 per teacher year.

Other Local Fringe Benefits: Four of the six districts provide partial reimbursement for costs of courses taken for required recertification purposes. Some pay a small amount; other districts may pay up to $55 per semester hour. Several districts pay something towards workshops, too. For example, one district allocates $150 per teacher per year for such programs.

## West Virginia

Funding of school districts in West Virginia is currently becoming more state oriented. The state is trying to obtain an equalized teacher salary schedule state-wide. Hence, the state pays counties different amounts per teacher at the present time to get salaries in less affluent districts up to a specified minimum level. If counties had been paying a supplement, they cannot reduce it during this interim funding plan. Otherwise, the funding system is a relatively traditional mixed-responsibility system.

## Major State Fringe Benefits

Social Security and Retirement: Public school teachers in West Virginia are required to be covered by social security and the State Teachers' Retirement System (STRS). Through membership in these programs teachers receive benefits for retirement, early retirement, disability, death, and survivorship. Local districts may, in addition, offer supplemental retirement plans.

Teacher contributions to the STRS are 6% of annual salaries. The state, for the 1984-1985 school year, appropriated $39,670,000 to this program, or roughly 7% of salaries.

Members may retire and receive maximum benefits if they have 35 or more years of service credit regardless of age, at least 30 years of service credit and are age 55 or older, or if they have at least 5 years of service credit and are at least 60 years of age. Teachers may apply for early retirement if they have at least 30 years of service credit but less than 35 and are less than 55 years old. The benefit will then be reduced for each year the teacher is under 55. After 5 years of service the teacher is vested in the retirement system.

The retirement benefit amount is calculated by multiplying years of service by 2% and then multiplying this figure by the final average salary which is the average of the 5 highest years of service out of the last 15. There are several optional retirement plans, the selection of which will reduce the benefit, as will early retirement. Benefits are not subject to West Virginia income tax but are subject to federal income tax after total benefits equal the retiree's contributions.

Retired teachers may accept full time employment within the system but they forfeit their benefit for as long as they remain employed. If the member later becomes unemployed, normal benefits will be resumed. If a retired teacher accepts employment outside the system, there is no loss of retirement benefits. Retired teachers are also eligible in the fiscal year following the fiscal year in which they retire to substitute in the public school system 100 days per year without loss of retirement benefits.

For each 200 day term, teachers receive one year of service credit toward retirement. Credit for teaching in public schools in other states may be purchased, provided the member has at least two years of West Virginia service credit for each year of out-of-state service that is to be purchased. A maximum of 10 years of out-of-state service credit may be purchased. In order to purchase credit for such service, the member must contribute an amount equal to double his contributions made in his first year of West Virginia service plus 6% interest compounded annually from beginning of West Virginia service to the date the out-of-state service is purchased. Members may receive credit for military service if, at the time of service, a draft was in force.

A major benefit is that this credit will be provided free if it is less than one-fourth of a member's total service.

Disability benefits are available after the teacher has 10 years of West Virginia service credit. Disability retirement may be provided at any age if the member is totally disabled for six months and the disability is permanent.

If a member dies before retirement, the survivor(s) usually receives a refund of the member's contributions plus the state's contributions plus interest. If the member had 25 years of service credit and was at least 50 years of age at the time of death, the survivor is entitled to a monthly benefit.

Health and Hospitalization: The state of West Virginia and other agencies provide a comprehensive medical benefits program which is state-funded. For the first year of coverage, the teacher must pay the full policy amount of $25.20 per month for the basic plan. After one year the state pays all of the cost, i.e., $25.20 per month per teacher.

Upon retirement, a teacher may qualify for continuation of coverage if he or she has earned a state pension benefit and was covered under the Public Employees Insurance Program while actively employed. At this time, retirees may also receive insurance credit for any unused sick leave they may have accumulated. The retiree will receive one free month of single medical insurance coverage for every two days of unused sick leave credit.

No dental, vision, or auditory care coverage is available under the state health plan.

Life Insurance: Public school teachers under the age of 65 are provided with $10,000 of life insurance coverage along with $10,000 of accidental death and dismemberment coverage at no cost to the teacher after the first year of employment. After age 65, the policy is reduced to $6,500.

Leave Benefits: Teachers are allowed 1.5 days of sick leave for every 20 working days which may be accumulated from year to year without limit. Four days of personal leave are allowed by the state per year, but these are charged against sick leave. No maternity leave days (or paternity leave) at full pay are provided; any time missed due to maternity must come out of sick leave. Though no paid sabbatical leave is provided by the state, teachers may take sabbatical leave without pay.

Unemployment Benefits: The state of West Virginia contributes to unemployment compensation programs, giving each school district 3.7% of their salary allocation.

Workers' Compensation: Teachers in West Virginia are eligible for workers' compensation that is state funded. Each district receives .94% of its salary allocation to use for this benefit.

Other State Fringe Benefits: Teachers are allowed to use any accumulated sick leave for credit toward health insurance. Upon retirement, teachers receive one month of single coverage free for every two days of accumulated sick leave, or one month of family insurance coverage free for every three days of unused leave.

Typical Local Fringe Benefits

The state of West Virginia provides public school teachers with numerous benefits such as social security, retirement plans, health

insurance, life insurance, leave time and workers'/unemployment compensation. Three school districts from this state were selected as representative high, middle, and low paying systems and were surveyed in order to determine what local benefits are available for teachers.

Retirement: The school district representing the middle group offers a supplemental retirement plan in addition to the plan offered by the state. Through this plan, retirees receive $20.00 per month for life. The annual cost to the local district for this plan is $70.00 per teacher and the cost to the teacher is $100.00.

Health and Hospitalization: Two of the three districts included in this survey provide teachers with additional medical insurance policies. The district representing the high paying group offers dental and optical coverage, the annual cost of which is $375 per teacher. The health insurance coverage provided by the middle paying district is in the form of dental care. Providing this benefit costs the local district $258 per teacher per year.

Life Insurance: None of the surveyed districts offer additional district-paid life insurance.

Leave Benefits: No special leave benefits beyond the state minimums are offered by the surveyed local districts.

Unemployment and Workers' Compensation: All of the three districts provide workers'/unemployment compensation programs for teachers, for which they receive funds from the state.

## Summary of Available Fringe Benefits, by State

The following tables summarize various elements of fringe benefits available to public school teachers in the twelve southeastern states

included in the study. It focuses on state-paid (directly or indirectly) benefits. This results in some apparent bias in the table against the states which let local districts set their own benefit policies. For this reason, care should be taken in making quick comparisons among states based on items noted in the table. Rather, this information should be taken as a starting point and the actual practice of local districts in particular states must be determined before any final conclusions are drawn regarding relative availability of benefits across states.

Still, though many districts with sufficient wealth in almost all states far surpass state benefit minimums, the majority (or at least a large number) of districts in each state only provide the minimum required benefits in such categories as leave time, health insurance, retirement, and the like.

TABLE 1

SUMMARY OF SELECTED CHARACTERISTICS OF FRINGE BENEFITS, 1984-85

| Benefits | AL | AR | FL | GA | KY | LA | MS | NC | SC | TN | VA | WV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Social Security | | | | | | | | | | | | |
| a) Available? | yes | yes | yes | * | no | no | yes | yes | yes | yes | yes | yes |
| b) Employee share paid by state? | no | no | no | no | -- | -- | no | no | no | no | no | no |
| 2. Retirement | | | | | | | | | | | | |
| a) Mandatory state retirement plan? | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes | yes |
| b) Employer contribution? | 9.75% | 13.86% | 12.24% | 13.23% | 12.85% | 9.3% | 8.75% | 11.05% | 7.3% | 15.03% | 11.15% | *** |
| c) Teacher contribution? | 5.0% | 6.0% | 0 | 6.5% | 9.6% | 7.0% | 6.0% | 7.0% | ** | 5.0% | 5.0% | 6.0% |
| d) Vested after__ years? | 10 | 10 | 10 | 10 | 5 | 10 | 10 | 5 | 5 | 10 | 5 | 20 |
| e) Annual benefit with 30 years service and $25,000 average salary base? | $15,938 | $11,925 | $15,000 | $15,000 | $18,750 | $19,050 | $12,500 | $11,775 | $11,799 | $13,122 | $11,781 | $15,000 |
| f) Annual benefit is __ percent of average salary base? | 64% | 48% | 60% | 60% | 75% | 76% | 50% | 47% | 47% | 53% | 47% | 60% |

*A significant minority of Georgia districts have opted out of social security.

**Teacher contribution is 4% of first $4,800 and 6% of remainder of salary.

***West Virginia contributes $1,482.82 per teacher or about 7.4% of a $20,000 salary.

TABLE 1 (Continued)

| Benefit | AL | AR | FL | GA | KY | LA | MS | NC | SC | TN | VA | WV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3. Health and Hospitalization Insurance | | | | | | | | | | | | |
| a) Basic, individual health plan available at state level? | yes | yes | * | yes | yes | *** | no | yes | yes | **** | no | yes |
| b) Annual cost to employer (state or local) per teacher for basic plan (dollar amount or percent of salary)? | $420 | $420 | * | 3.9% | $646 | *** | -- | $577 | $738 | **** | -- | $302 |
| c) Dental care included at no cost (or partial cost) to teacher? | no | no | * | no | no | *** | -- | no | yes | **** | -- | no |
| d) Vision and/or hearing care included at no cost (or partial cost) to teacher? | no | no | * | no | no | *** | -- | no | no | **** | -- | no |
| 4. Life Insurance | | | | | | | | | | | | |
| a) Basic life insurance plan through private carrier available from state at no cost to teacher? | no | yes | * | no | yes | *** | no | no | yes | **** | no | yes |
| b) Face amount? | -- | $5,000 | * | -- | $3,000 | *** | -- | -- | $3,000 | **** | -- | $10,000 |
| c) Is there an additional one-year-of-salary (or some other multiple) death benefit paid by state? | yes | no | no | no | ** | yes | no | yes | yes | **** | yes 2xSalary | no |
| d) Annual cost to state or local district per teacher(dollar amount or percent of salary)? | ? | -- | -- | -- | .00905% | ? | -- | ? | .003% | **** | ? | -- |

*Florida is a locally oriented system with good overall financial support from the state (about 65% of total local costs). Specific benefits are left to local districts.

**The Kentucky Retirement System provides $2,000 of paid up life insurance and monthly benefits to survivors of active members who die.

***Health and life insurance are locally provided in Louisiana, but the state provides lump-sum funding to districts of about 4.0% of salaries.

****Tennessee is locally oriented with respect to benefits. State formula funding enables local districts to provide health and life insurance. In addition, the retirement system does have several in-service death benefits that are equivalent to many thousands of dollars of life insurance.

TABLE 1 (Continued)

| Benefit | AL | AR | FL | GA | KY | LA | MS | NC | SC | TN | VA | WV |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5. Leave Benefits | | | | | | | | | | | | |
| a) Number of sick leave days allowed BY STATE assuming nine-month contract? | 9 | 9 | 9 | 11¼ | 10 | 10 | 7 | 9 | 12 | 9 | 9 | 13½ |
| b) Sick leave days accumulation limit? | 150 | 45 | no limit | 45 | no limit | no limit | 30 | no limit | 90 | no limit | ** | no limit |
| c) Number of personal leave days NOT charged to sick leave? | 2 | 0 | 0 | 0 | 3 | 0 | 2 | 2 must pay substitute | 0 | 2 | ** | 0 |
| d) Is an extended sick leave period available (a) without pay or (b) with cost of substitute only deducted? | no | no | no | no | no | yes(a) | yes(b) | yes(b) | no | no | ** | no |
| e) Number of maternity leave days NOT charged to sick leave? | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | 0 | 0 | ** | 0 |
| f) Is paternity leave allowed? | no | no | no | no | no | no | no | * | no | no | ** | no |
| g) Is there a true, paid (partially or wholly) sabbatical leave program available? | no | no | no | no | no | yes | no | no | no | no | ** | no |
| h) Is there a true, paid vacation leave program available to nine or ten-month contract teachers? | no | no | no | no | no | no | no | yes 10 to 21 days | no | no | ** | no |

*Any teacher, male or female, in North Carolina may take up to one full year of leave without pay for the birth or adoption of a child.

**Virginia sets a minimum sick leave standard of at least one day per month, but allows local districts to set all other leave policies as well as add to the sick leave minimum.

## III. Valuing Summer Leisure of Teachers

In the previous section, several standard fringe benefits were identified and their availability in southeastern states discussed. Before the monetary value of the full fringe benefit package can be estimated and reported in the following section, consideration must be given to summer leisure available to teachers on standard contracts for periods less than a full year in length. In this section, the question of whether summer leisure is a benefit or an unhappy circumstance of educational employment is investigated. The result is that the constraint on teacher labor supply restricts choices and, therefore, requires that a compensation premium be paid to teachers operating in a relatively competitive labor market. However, it is shown that the leisure time actually available to teachers is not without value and that this leisure is also part of the total compensation available to teachers. Finally, estimates of the average value of the constraint premium are made, yielding some very interesting implications for teacher salaries and school finance.

Schools are operated for most primary and secondary students for only about nine months of each year. This traditional schedule may exist to allow continuing education for teachers, plant maintenance, students to take advantage of non-school opportunities such as work, camps, and the like, remediation, or perhaps it is the result of precedent set when our economy was primarily agrarian and students were needed on the farm from planting until harvest. Whatever the reason, the short school year means that those employed to teach students cannot be productively employed in this activity for a significant

part of the year. How to treat teachers' free time in the summer is a question that is both controversial and of considerable importance for policy. On the one hand, it is argued that this work schedule gives teachers a distinct advantage. Many have school-age children themselves, and this work schedule permits them to be home when their children are not being supervised in school. This argument is circular, of course, because if schools were operated year round, then supervision of children in the summer would be done by the schools. Teachers who are parents would not be handicapped by year round work schedules. There may, nevertheless, be a group of people who wish to supply less than the standard forty-eight to fifty weeks of work per year. If this is true, then this work schedule with its two or three month break may be regarded as an advantage.

On the other hand, teacher groups have argued that this "abnormal" work schedule imposes a hardship on teachers, that most teachers prefer to work longer than they are employed to teach each year. Indeed, in one survey of Alabama teachers [Cotter and Hardee, 1984], it is reported that 55 percent of primary and secondary teachers contacted in that state have worked in second jobs at some point in their careers to supplement their incomes. Fifty-one percent of this group had done so during the previous year. If, in fact, most teachers are constrained to work less than they would otherwise, we must regard this work schedule as a disadvantage to teachers rather than a benefit. Moreover, as we show below, this implies that, whatever the advantages of operating schools for a partial year, this is not achieved costlessly. Teachers in competitive labor markets would have to be paid a premium wage rate

to be induced to accept this disadvantage. Therefore, the costs of instruction per unit could, where this is true, be lowered by lengthening the school year to accommodate the wishes of teachers to obtain higher total incomes by working longer each year.

Our results below show that teachers as a group, when compared to a similarly constructed sample of full time workers in the population at large, work significantly fewer weeks per year. These results further suggest that teachers would be willing to accept a wage rate 9.9 percent lower, if they were permitted to work extra weeks per year. Since most educational physical plants are unused in summers, the reduction in cost per unit (i.e., cost per student taught per day) from expanding the teacher work schedule could be substantial.

Constrained Labor Supply and Wage Rates

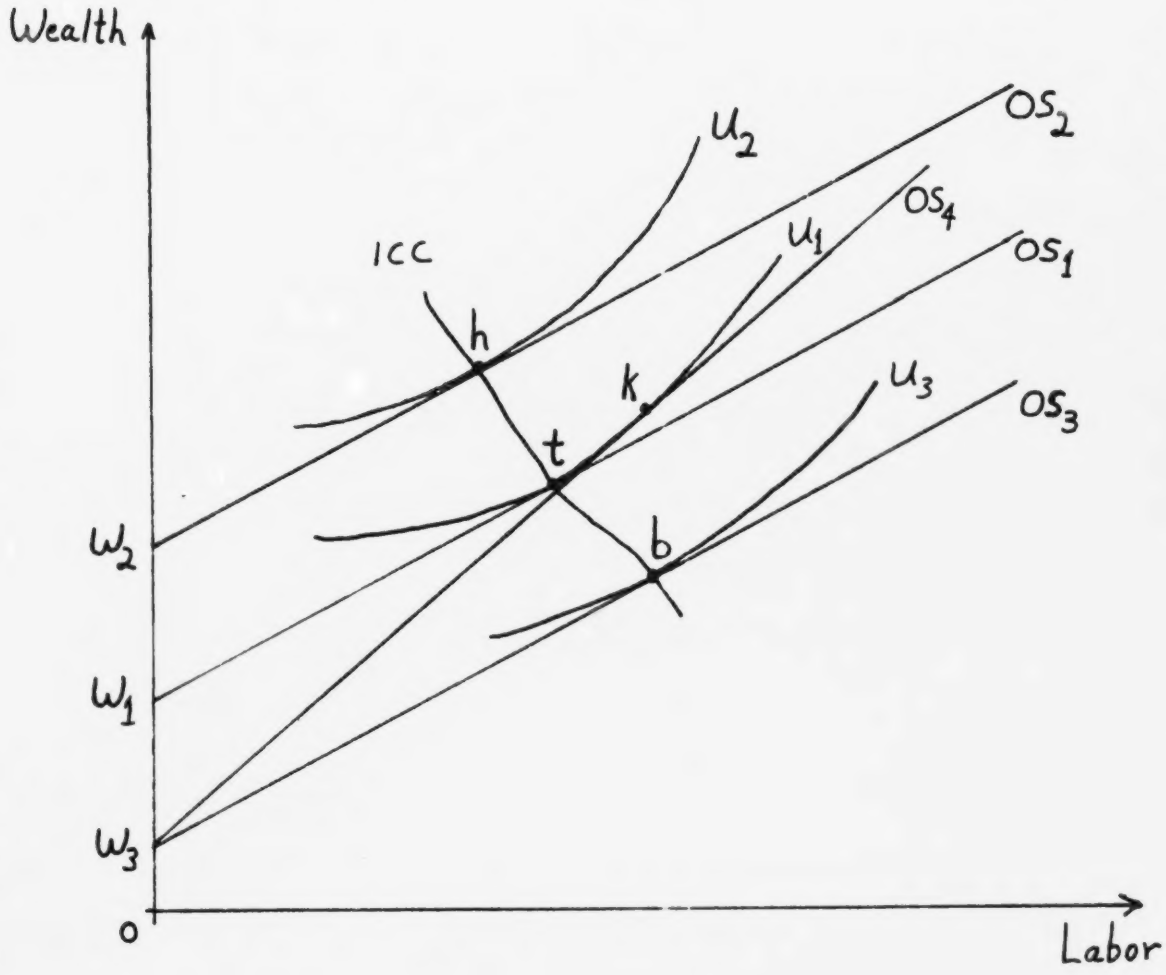
We begin by introducing a well-developed model [Lindsay, 1971] of occupational choice in which both wages and weeks worked are endogenous. That is, workers supply themselves to occupations on the basis of wage rates, then choose the amount of work to supply in that occupation. Initially, we assume that workers are free to set their own schedules and hours. This assumption is relaxed later or replaced with the actual restricted work schedule faced by most teachers. Wages vary because of the different educational and training requirements for alternative occupations, and this wage rate variation produces variation in the hours chosen. Since we also assume that workers are identical, however, all choose the same schedule in each occupation.

Figure 1 depicts a wealth-hours space over which combinations are ordered by a utility function for which the marginal rate of substitution of leisure for wealth is negative. This simply means that leisure time and wealth are substitutes, that the typical person is willing to give up some amount of wealth to get more leisure, and vice versa. Realistically, there are several margins of adjustment for such a choice between leisure time and wealth. Workers choose the length of day, week, number of holidays, and the number of weeks they work per year. For simplicity in presentation, these are all compressed into a single dimension, labor.

We also assume for the purposes of exposition that the interest rate is zero, so that earnings over the lifetime may be aggregated without the complication of discounting. The qualitative results of the model are unaffected by this assumption, and empirical work reported below is estimated in semilog form to incorporate standard human capital discounting consideration.

It is easily shown that the amount of labor supplied is influenced by the wage rate and the amount of nonwage income (initial wealth, savings, and income of other family members) available to the worker. In Figure 1, for a base level worker with no training and nonwage wealth of $W_1$, the opportunity set of wealth and labor supplied is given by $OS_1$. The slope of this opportunity set is, of course, the wage rate. The worker will choose combination t along this opportunity set. Combination t represents the highest level of satisfaction the base worker can attain, given the set of opportunities available to him. An equally paid worker with more nonwage wealth, e.g., $W_2$, however,

FIGURE 1



will choose combination h along parallel opportunity set $OS_2$ providing less labor and more leisure, if leisure is a normal or desirable good.

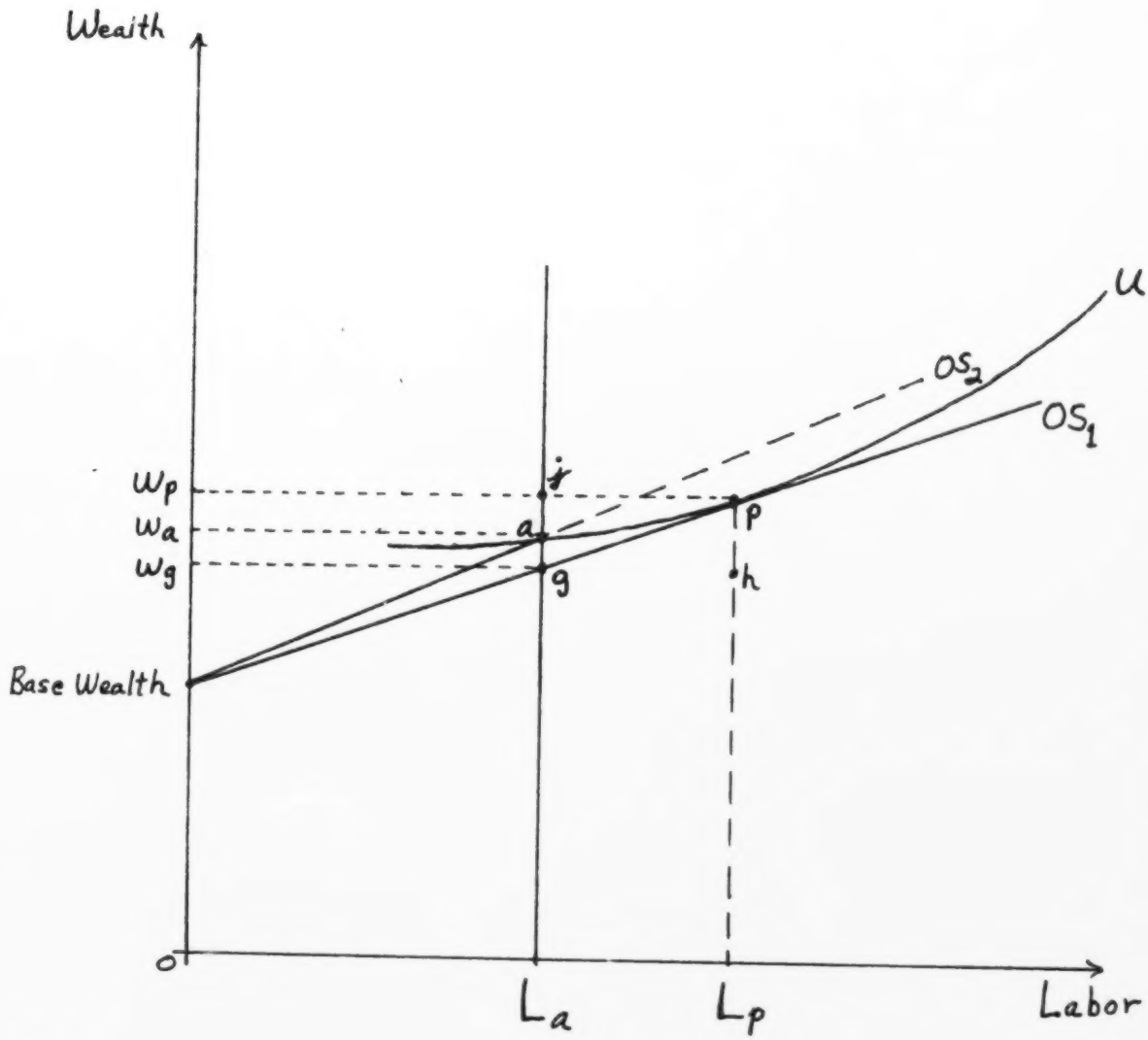
Investment in training and education requires the expenditure of household resources either directly in the form of tuition and other out of pocket expenses or indirectly in the form of foregone earnings. This reduction in wealth must be compensated for through the receipt of a higher wage rate. For example, a reduction in nonwage wealth from $W_1$ to $W_3$ with no wage increase would provide combination b, at best, which is less preferred than any on $OS_1$. Only if wages rise in this more highly trained occupation to the level indicated by the slope of $OS_4$ does a combination such as k become available which is equally attractive to combination t obtained without the training. Note, however, that workers who invest in this training will both earn higher wages and supply more labor. The theory has two implications: labor supply is negatively related to nonwage income and positively related to the amount of education and other human capital possessed, which command a higher wage rate in the market.

School teachers, as we have noted, generally may not be responsible for the work schedules they follow. In other words, they usually are not free to select any combination of labor and earnings associated with the wage rates they receive. Under such circumstances, it is possible that school boards must pay a premium per unit of work to attract qualified workers into this occupation over and above the amount that workers with their training and qualifications might receive in other occupations where workers are not constrained to work less than

they desire. It is possible that school teacher opportunity sets are discontinuous, and that teachers find themselves on a corner and must be compensated for this inconvenience.

This can be seen in Figure 2. Opportunity set $OS_1$ represents the unconstrained combinations available to workers with a given amount of human capital and nonwage wealth. The opportunity set for workers without this level of training has been deleted in the interest of clarity. Combination p is preferred at this wage rate involving the supply of $L_p$ hours of labor. Assume, however, that teachers are constrained to work no more than the actual amount, $L_a$. At the wage rate paid to other unconstrained workers and represented in $OS_1$, teachers would obtain only the inferior combination g, resulting in wealth level $W_g$ instead of $W_p$. Competition among employers will not permit teachers to be exploited in this way, however. As long as other employment is available offering combination p, no worker will choose to become a teacher. In order to make this occupation attractive to potential teachers, the wage rate must rise until a combination is available that is the equivalent of combination p. That can only occur if the wage rate rises to the slope of $OS_2$ permitting workers who supply no more than $L_a$ hours of labor to obtain combination a, the actual combination that occurs in the market and yields wealth level $W_a$. A test of the presence of this work period constraint is the following implication: **Hourly rates for school teachers are predicted to be higher than are wages for workers in occupations requiring the same amount of human capital.**

FIGURE 2



Note, however, that $OS_2$ is discontinuous; it does not extend beyond combination a. Even though they desire to, workers may not choose combinations along the dotted portion of this curve. Since indifference curve U is convex (meaning leisure and wealth are substitute goods), we may conclude that the reservation wage of teachers for additional marginal employment is less than that for unconstrained workers supplying $L_a$ hours of labor. These workers (teachers) are often induced to supplement their professional earnings, even at wages below those earned by the other lower paid workers with equivalent qualifications. We may therefore derive a second major implication from this model: **A higher proportion of school teachers will have second jobs than is found among workers with equivalent training.**

These two hypotheses will be tested momentarily, but before proceeding we wish to make the analysis very clear by stating it another way while still referring to Figure 2. Is summer leisure a benefit or a cost to the teacher? Consider the following. A teacher would surely prefer a given salary for nine months of work to the same salary and twelve months of work. Clearly, leisure time has value. The question is how much value. Now, turn the situation around and ask a slightly different question. Suppose a teacher is working twelve months at a particular wage rate and earning a given total wage. How much of the total wage (or earnings) would the teacher give up ("pay") to have three months off? Clearly, some teachers would pay at least $5.00, i.e., accept a total wage five dollars lower, so they would only have to work nine months instead of twelve. How many would give a week's pay to get the three months off? A month's pay? Teachers on annual contracts would probably not give up <u>more than</u> three month's

pay to get three months of summer vacation because they can already choose to do that. So, the value of three months of summer leisure lies somewhere between zero (because it is unlikely that teachers would pay nothing to have three months off) and roughly one-quarter of their (hypothesized) twelve-month salary (which says they would pay up to everything they could earn during the summer in order to have the summer free).

Now, let's return to Figure 2. Our typical teacher is not allowed to choose combination p representing twelve months of work and a total wage that when added to a base amount of wealth from other sources yields a total wealth level of $W_p$. This, however, is the teacher's preferred combination. The teacher's preferences are contained in curve U, which shows all the combinations of work (labor amounts) and resulting wealth levels that are equivalent to each other. Since $L_a$ is the work (nine months) that is actually allowed, the teacher would be at g, and less well off than at p. How much compensation is required, i.e., what wage premium is required, to make the teacher just as happy as he or she would be at combination p? The amount gj (or $W_pW_g$) would be more than enough because the teacher would be earning the same total salary and winding up with the same total wealth, $W_p$, but having to work much less. On the other hand, giving the teacher nothing for having to work less than his or her preferred amount and receiving only $W_g$ final wealth, i.e., moving to combination g, would be less than enough. The way the utility curve is drawn in Figure 2, this typical teacher must be compensated ga amount (or $W_a - W_g$ amount) to put him or her at combination a, which is equivalent in every way to the teacher's preferred position, p. Note three things about combination

a: (1) it contains more total wage than is in combination g by ga amount (the teacher is being compensated through a higher wage rate to accept less work) and it contains more leisure than is in combination p; (2) the full wage loss from being denied position p (full work) and moving to g (nine months work at the old wage rate) is not made up, and the difference between ga (the wage premium or the part that is made up) and gj (the total wage loss) is the monetary value of the extra leisure obtained; and (3) this is the actual combination that occurs in the market, i.e., over the long run, compensation schedules have changed so that teachers now in labor market equilibrium are receiving a premium for accepting less than their preferred amount of work.

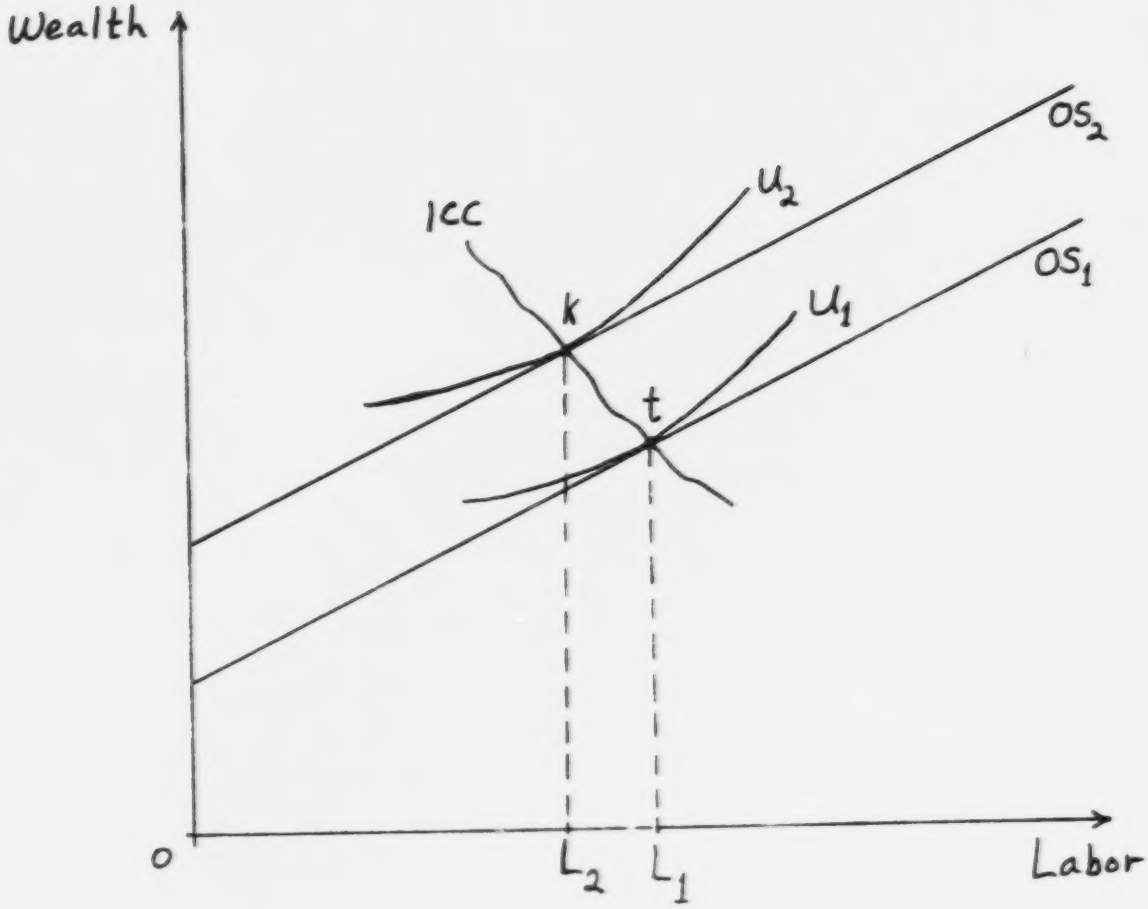
Note further, that if the utility indifference curve were not convex, but a straight line coinciding with $OS_1$, then combination g would be equivalent to the chosen combination p. This would mean the lost salary (in g) was exactly offset by the extra leisure (also in g). In other words, the value of the extra leisure from working only nine months would be exactly equal to the income given up, and no premium for having to work a shorter period would be necessary nor exist in the market. On the other hand, if the utility curve were kinked or otherwise a straight line from p over through j, then summer leisure would have zero value to teachers and, in a competitive market, they would have to be paid a premium equal to one-quarter of the twelve months salary or, what is the same thing, one-third of the nine months salary. Among other things, it is the existence of this premium we wish to test in the remainder of this section, and, if it exists, we wish to estimate its magnitude.

Teachers as a Representative Subset of the General Population

The two testable hypotheses discussed earlier -- the existence of a wage rate premium for teachers due to constrained work schedules and a disproportionately high number of moonlighting teachers -- are implied only if school teachers are similar to the population of non-teachers. It is quite possible that teachers as a group contain a disproportionate number of workers who prefer to supply less labor. Indeed, our theory suggests the presence of such a group. The preferred amount of labor was shown above to vary at a given wage depending on nonwage wealth. One group of workers who would be predicted to prefer less work at a given wage rate is the one comprised of workers with working spouses. It may be possible, therefore, that a disproportionate number of school teachers have working spouses, and that they require no wage premium in order to pursuade them to supply the shorter workyear. This situation may be as depicted in Figure 3. Workers with nonworking spouses and single workers may be disproportionately represented in non-teaching occupations supplying $l_1$ units of labor, while disproportionate numbers of workers with working spouses are congregated in teaching. Because each group of workers is supplying the quantity of labor that it chooses, neither commands a wage premium.

While possible, this argument, on its face, is not completely convincing. It leaves unanswered the crucial question of why such workers would choose teaching as the occupation in which to congregate. That is, unless there are other good reasons to operate schools for less than the full term, there is no reason for those wishing to supply lower than normal levels of labor to congregate in disproportionate

FIGURE 3



numbers in this occupation. It does suggest, however, that those with working spouses as well as those with other nonwage wealth will accept lower wages to teach.

Wage Compensation for Short Work Schedules

The procedure used to test the theory and to estimate the wage premium paid to teachers for this constraint on their work schedules is briefly outlined here. A detailed description of that procedure will follow.

Census data on all full-time workers is used to predict the schedules teachers would choose to work, based on worker and labor market characteristics. (A discussion of the data is presented immediately following this section.) That is, labor supply equations are estimated, the parameters of which can be employed to predict the number of hours and weeks chosen by workers with any particular set of characteristics. The difference between the schedules actually worked and those predicted to be chosen measures the extent to which individual teachers are constrained.

Our theory predicts that wage rates are positively related to this difference between desired and actual hours and weeks worked. That is, the more severe the constraint on number of weeks teachers are allowed to work, the greater will be the wage rate premium. The second step of the procedure is, therefore, to observe the relationship between the wage rate and this difference for teachers. We assembled from the Census data a test group of primary and secondary public school teachers. We then regressed the effective wage rates of these educators

on variables predicted to influence their pay including this work schedule constraint variable. The results are largely supportive of our theory. **Teachers as a group work significantly fewer weeks per year than they would choose to and are paid more per hour as a result.**

The Labor Supply Equation

It is quite plausible that the constraint on labor supply operates with the effect described on two margins. Both hours per week and weeks per year may be affected. We have therefore tested for the effect on both. The labor supply equation estimated has the following form:

$$\text{WORK} = b_0 + b_1\,\text{EDUCATION} + b_2\,\text{EDUCATION}^2 + b_3\,\text{AGE} + b_4\,\text{AGE}^2 + b_5\text{WIFE*KIDS} + b_6\,\text{NONWAGE INCOME} + b_7\,\text{SEX} + b_8\,\text{URBAN} + b_9\,\text{SMSA RANK*URBAN}$$

The data employed were from the March and May 1977 Census of Population Survey (CPS) tapes. Definitions of the variables and their modes of construction, where applicable, are provided in the discussion of the data at the end of this section. Here our discussion is limited to the rationale for the inclusion of each variable as well as its hypothesized sign.

WORK. In the hours equation, this variable is the number of hours worked reported in the week prior to the survey. Some confusion is apparent in responses to the question concerning weeks worked the previous year in the survey. A large number of respondents interpreted this question to concern the number of weeks employed, for approximately 60 percent answered this question with 52 weeks. For this reason, it was necessary to construct a measure of weeks worked from other data reported. This is described in the Data Appendix.

AGE, $AGE^2$. It seems quite plausible that labor supply might vary over the life cycle, holding other factors constant. During the early years of a worker's career, many will have young children at home who require more time for care and nurturing. During the autumn years, on the other hand, workers look forward to retirement and may enter this state gradually by slowly reducing the labor they supply to the market. These thoughts suggest the possibility of a labor supply function that rises over time in the early years of the career, reaches a peak, and then declines. For this reason, we have included both AGE and the square of this variable in these estimates.

EDUCATION, $EDUCATION^2$. The theory suggests that labor supply is positively related to level of education. Investment in education raises productivity in work relative to leisure activities leading those with more education to substitute income from work for household production and leisure activities. A squared term is also included to capture the possible higher order effects of education.

SEX. This variable is included to capture the effect of any possible differential labor supply behavior due to the sex of the worker.

WIFE*KIDS. This variable allows the family status variable to interact with the number of children under eighteen present in the household. Children represent an additional household responsibility that typically falls on the wife. This variable is included to measure the impact of this responsibility on labor supply.

URBAN. This variable is included to capture the effect that the work environment may have on the quantity supplied. To the extent that workers in urban environments will typically face longer commutes,

we predict that some portion of this commuting time will be deducted from both work and leisure. We therefore predict that workweeks supplied by urban workers will be shorter. This variable is also included in the workyear equation, although we predict no sign, a priori.

SMSA RANK*URBAN. This variable allows the size of the SMSA to interact with the urban dummy variable. SMSAs are ranked by size from 1 to 61. As these ranks may be considered to proxy the lengths of the commutes, an extension of the argument for the URBAN variable suggests that labor supply will be related to rank with SMSAs.

## Estimates of Labor Supply

Ordinary least squares regression estimates of the labor supply equations are presented in TABLE 2. Although the $R^2$s of these equations are quite low, the F statistics indicate the equations taken as a whole explain statistically significant amounts of the variation in labor supplied. The weeks equation is troubled by the misreporting in the dependent variable discussed above. We are encouraged, nevertheless, by the similarity of these results and those in the hours equation. The predicted effects are confirmed in each case in both.

The effect of education is to increase labor supplied in both equations, as predicted by our theory. The relationship identified is quadratic in both cases. The effect of education on weeks and hours worked is positive and increasing with level of education throughout the range of this variable among our teachers. Both AGE and its square are significant, and the estimated shape conforms to our earlier hypothesis. Labor supply in each equation rises at a decreasing rate

TABLE 2

LABOR SUPPLY, U.S. WORKERS REPORTING FULL TIME WORK

| Variable | Weeks per Year | Hours per Week |
|---|---|---|
| R-Square | .08 | .10 |
| F statistic | 112.8 | 357.3 |
| Observations | 9,181 | 9,181 |
| CONSTANT | 15.1100 | 42.7011 |
| | (9.01) | (39.39) |
| EDUCATION | .9698 | -.4205 |
| | (5.27) | (-3.54) |
| EDUCATION$^2$ | .02518 | .02517 |
| | (3.60) | (5.57) |
| AGE | 1.0413 | .1343 |
| | (17.65) | (3.51) |
| AGE$^2$ | -.01072 | -.001595 |
| | (-14.85) | (-3.41) |
| SEX | -1.6014 | 3.1813 |
| | (-6.30) | (-19.29) |
| WIFE*KIDS18 | -1.3572 | -.2530 |
| | (-7.78) | (-2.23) |
| WAGE INCOME | -9.103 E-06 | -2.760 E-05 |
| | (-6.23) | (-2.91) |
| NONWAGE INCOME | -.0001397 | 5.153 E-6 |
| | (-3.32) | (0.19) |
| URBAN | .03704 | -1.4363 |
| | (0.12) | (-7.43) |
| SMSA RANK*URBAN | -.006373 | .02344 |
| | (-0.51) | (2.75) |

to a peak (at 48 years in the weeks equation and at 42 years in the hours equation) beyond which it falls. Being female and having children in the home both reduce labor supply in both equations. Women workers supply about 1.6 fewer weeks per year than statistically matched males and about 3.2 fewer hours per week. Being a wife with children under eighteen subtracts an additional 1.4 weeks per child and a quarter of an hour per child from the typical work schedule.

The theory also predicts that other household income reduces labor supply, and this implication is also supported by these results. The effect of wage income of other household members is slight, reducing labor supply by .009 weeks and .027 hours per $1,000, but significant in both equations. Nonwage income reduces weeks supplied substantially (.14 weeks per $1,000), but seems to have no effect on hours.

Finally, the labor market environment seems to have played a role as well. Although our dummy variable URBAN as well as the interaction of this dummy with SMSA RANK has no effect on weeks worked, both significantly affect hours per week. Earlier we suggested that commuting time would be subtracted from both leisure and hours worked per week, and this result is strongly supported in the data. Workers in an SMSA supply about 1.4 fewer hours per week. The interaction of SMSA RANK*URBAN is also significant in the hours equation. We suggested that size is related to commuting time, hence larger size implies less labor supplied. As size is inversely related to rank, the positive coefficient may be interpreted as indicating that higher rank (and a longer commute) is associated with fewer hours supplied.

Do Constrained Hours Increase Wages?

A subsample of all public primary and secondary teachers was then created from the original sample, and the residuals from both the hours and the weeks equations were recovered. Our maintained hypothesis holds that these residuals will be predominantly negative for teachers, and that wages paid must increase at an increasing rate with the magnitude of this difference between actual and desired labor supply.

The first of these hypotheses is confirmed, at least with respect to weeks worked, by noting that the mean of this residual for teachers is negative in the weeks equation. We denote the residual from the weeks equation RWEEKS and the residual of the hours equation RHOURS. The mean of RWEEKS is -1.00 and a t-test of the significance of the difference of this mean from zero yields a statistic of -3.93. Perhaps surprisingly, the mean of RHOURS is positive and of borderline significance. This suggests that teachers may compensate in part for the constraint on the number of weeks they may work by working more hours per week. This mean is 0.74 with a t-ratio of 1.83.

To test our second hypothesis, we regress the natural logarithm of the wage rate on these residuals and other variables predicted to influence the wage rate. The equation estimated here and reported in Table 3 is

$$\begin{aligned} \text{LNWAGE} = {} & B_0 + B_1\ \text{RHOURS} + B_2\ \text{RHOURS}^2 + B_3\ \text{RWEEKS} + \\ & B_4\ \text{RWEEKS}^2 + B_5\ \text{EDUCATION} + B_6\ \text{EDUCATION}^2 \\ & + B_7\ \text{EXPERIENCE} + B_8\ \text{EXPERIENCE}^2 + B_9\ \text{RACE} \\ & + B_{10}\ \text{SEX} + B_{11}\ \text{URBAN} + B_{12}\ \text{SMSA RANK*URBAN} \\ & + \text{STATE DUMMY VARIABLES} \end{aligned}$$

Although many of these variables also appear in the labor supply equation, the justification for their inclusion here is in some cases quite different and merits separate discussion.

SEX. It is often alleged that wages paid to women are less than those paid to men because of discrimination. There are other nondiscriminatory reasons why women might be expected to earn lower wages than men, but this debate is beyond the scope of this research. See several discussions of theories of nondiscriminatory wage differentials by microeconomists [Gwartney and Stroup, 1973; Mincer and Polachek, 1974; and Landes, 1977]. Nevertheless, the facts are that regressions of the wage rate on sex typically find this an important and highly significant determinant of variation in wages. This dummy has a value of one if female and zero if male.

RACE. This variable has a value of one if the worker is a member of a minority race. Otherwise it takes a value of zero. This is included to identify effects such as those mentioned in connection with SEX that may operate through the race of the worker.

EDUCATION, EDUCATION$^2$. According to the theory presented above, education is predicted to affect the wage rate as labor supply. The square of the number of years of education completed is included, as in the labor supply equation, to identify higher order effects.

EXPERIENCE, EXPERIENCE$^2$. As pointed out in the Data Discussion immediately following this section, this variable measures only years not devoted to education, at best a measure of years potentially in the labor force. It fails to differentiate between experience in the current job and experience in some unrelated occupation or even adult

TABLE 3

WAGES OF U.S. PUBLIC SCHOOL TEACHERS:
EFFECTS OF WORK SCHEDULES

$R^2$ = .66 F = 13.63 N = 484

| Variable | Coefficient | t-Ratio |
|---|---|---|
| CONSTANT | 8.4520 | 5.18 |
| RHOURS | -.006511 | -5.70 |
| RWEEKS | -.02147 | -9.35 |
| $RWEEKS^2$ | .000328 | 2.31 |
| EDUCATION | -.7891 | -4.12 |
| $EDUCATION^2$ | .02351 | 4.39 |
| EXPERIENCE | .02004 | 6.11 |
| $EXPERIENCE^2$ | -.000318 | -3.60 |
| RACE | -.000584 | -0.02 |
| SEX | -.005352 | -0.24 |
| URBAN | .2172 | 5.96 |
| SMSA RANK*URBAN | -.006530 | -4.79 |
| STATE DUMMY VARIABLES | ----- | ----- |

years out of the labor force. This variable is nevertheless included as a proxy of the worker's investment in on-the-job training [Mincer, 1974]. Studies of the effect on the life-cycle wage rate of investment in training that depreciates over time yield results that are consistent with an upwardly convex curve over the life cycle [Porath, 1967]. For this reason, the square of years of experience is also included.

URBAN, SMSA RANK*URBAN. URBAN is a dummy variable which takes a value of one if the household lives in an SMSA and zero otherwise. Wages are typically higher in cities, reflecting the higher costs of living there. For the same reason, wages are higher in larger cities than smaller ones. We therefore include the interaction of the URBAN dummy with SMSA RANK. Recall that this rank is an inverse ordering with size, so a negative coefficient is predicted for this variable.

STATE. Separate dummy variables are included for each state. These are included to reflect differences in the cost of living and other location specific effects that affect wage rates. Although we do not report the coefficients on these dummies in Table 3, they enter highly significantly as a group ($F = 3.58$), and, individually, several are quite significant (27 have t-ratios greater than 2.00 in absolute value).

## Estimates of the Effect of Constrained Supply

Our general hypothesis holds that school teachers are constrained by the abnormally low work schedules they must follow and must be compensated with higher wage rates to induce them to supply labor to

this market. Before moving to a discussion of these effects, let us briefly comment on the influence of the remaining variables in the wage rate equation. Education and experience both are significant in the equation, and are significant in both their forms (as squared values as well as unadjusted amounts). The coefficient of education on the log of wages is widely interpreted to be the rate of return earned on education. In our sample of teachers, this rate of return is positive and rising at the mean value of education (17.7 years). The estimated rate of return at this mean is 4.3 percent.

Similarly, experience conforms to our hypothesis of an upwardly convex curve over the working career of teachers. Teachers' wage rates reach a maximum at 31.5 years of experience. Surprisingly, in view of the frequency with which race and sex are found to have significant wage effects in micro data sets such as these, these two variables have very small and insignificant coefficients in this equation.

The performance of our variables of interest supports the hypothesis that teachers are constrained by their work schedules. In both the case of weeks per year and hours per week, school teachers reveal themselves to be willing to accept a lower wage in order to work more. That is, if given a choice, teachers would choose to work more, rather than less, at the existing hourly wage rate. Thus, we can conclude that the summer layoff imposed on teachers is a penalty rather than a benefit, and that school district authorities are incurring higher unit labor costs as a result.

This result is implied by the negative coefficients on both the RWEEKS and RHOURS variables in the regression results. In particular, based on the estimated coefficients, teachers would be willing to accept

up to a 9.9 percent reduction in their hourly wage rate in order to be allowed to work 5 to 10 extra weeks per year. This clearly indicates further that summer leisure has significant value since monthly wage rates for teachers have not risen a full 33 1/3 percent so that when applied to nine-month teacher salaries a "worthless" three month vacation is fully offset.

Similarly, we estimate that teachers would be willing to take a 3.25 percent cut in their hourly wage rate to be allowed to work 5 more hours per week. It is not reasonable to expect that school districts could extract all of this surplus from teachers, but the numbers do suggest that something like a 5-7 percent savings in salaries could be accomplished by standard twelve month/forty hour per week employment of school teachers.

Even though our estimates support the argument that school teachers are constrained in their choice of the term of employment, they also suggest that our estimating procedure is biased. The bias shows up in the fact that the estimated function relating the wage to residual weeks worked does not reach a minimum where residual weeks are zero. Similarly, the estimated relationship between RHOURS and the wage rate is everywhere downward sloping. The theory says that at zero residual work the wage effect should turn from downward to upward sloping. This is an implication of the convex indifference curve shown in Figure 2 (p. 107). One interpretation of our empirical result is that, instead of predicting workers' hours at p, our estimating procedure predicts desired work somewhere to the left of its true value. In that sense, the wage contour we plot continues to fall beyond our estimate of zero

residual work. The causes of this bias are potentially several: measurement error attributable to the survey nature of the data, a truncated distribution of the dependent variable in the labor supply equations due to the limit on the amount of time one can work, as well as omitted and mismeasured variables such as experience discussed above. All or any of these effects are likely to bias our estimates of desired work in the direction of understating residual work. An alternative interpretation is that school teachers are not alone in facing a constraint on the amount of work they are allowed to supply.

In all events, the fact remains that the relationship between work and pay for school teachers is negative: teachers on average are willing to work more for a lower pay rate in order to increase their total annual compensation.

## SUMMARY

In this section we have attempted to answer the following question: Do teachers regard their present work schedules involving substantial free time in the summers to be an advantage or a disadvantage? The answer to this question clearly depends on the desired work schedules of those employed in this occupation. On the one hand, it might be argued that those workers who choose this occupation do so in order to work fewer weeks per year. The alternative hypothesis treats workers as similar in their labor supply objectives to others with the same educational, age, and market characteristics. According to this view, constraints on the work schedules of teachers are regarded as disadvantageous, and wages must be adjusted to compensate for this feature of that occupation.

We have chosen to model the latter hypothesis. Desired labor supply both in weeks and hours per week is extrapolated for teachers with varying characteristics from a sample of all full time workers. A regression of wages on the deviation of actual from desired labor supply tests the hypothesis that teachers are indeed compensated in this manner. While the estimated results do not confirm that hypothesis in all details, they suggest that work schedules are a binding constraint on the labor supply of teachers. Wage rates decline monotonically with the algebraic value of the deviation of desired from actual labor supplied. This has an interpretation which is somewhat different from either of the two hypotheses just offered. It suggests that teachers are not like other workers, but differ in the opposite direction from that suggested by the former hypothesis. The statistical results suggest that teachers as a group wish to supply abnormally large amounts of labor and are willing to accept lower wage rates for any increase in their work schedules. This raises serious questions about how such an unsuitable group of workers ever found its way into the teaching profession, but we have no answer to those questions here. We can only report what the data say, and these have spoken in a particularly enigmatic way.

Clearly, this research has raised a number of important and yet unresolved issues. The topic of work scheduling and its implications for labor supply and the cost and productivity of our educational resources has been the subject of almost no formal analysis to date. The present study has only broken the surface of this subject, yet it has unearthed some intriguing results. It suggests that substantial

savings in labor cost can be achieved by expanding the work schedules of teachers. Clearly, these results need to be replicated with other data and analyzed from additional vantage points. If substantiated, however, serious attention must be given to altering the traditional school calendar.

## DATA DISCUSSION

In order to test the theory, we required data on workers from both the 1977 March and May Census of Population Survey (CPS) tapes. This year was chosen from the set 1971-1981 because it is arguably the least affected by aggregate economic performance. CPS tapes report the following variables that were of interest to us:

**From the March 1977 Survey**

WEEKS -- weeks worked over the last year

WAGES -- annual wages and earnings

FYTOT -- total family income

FYOUT -- family income from non-wage sources

NONWAGE INCOME -- family income minus individual earnings, wages, and earnings

**From the May 1977 Survey**

SALARY -- average weekly salary

**Included on Both 1977 Surveys**

HOURS -- average hours worked each week

AGE -- age

SEX -- men = 0, women = 1

RACE -- whites = 0, black and others = 1

EDUCATION -- years of education completed

EXPERIENCE -- AGE minus EDUC minus 6

WIFE -- marital status reported as wife in family

SMSA RANK -- population rank of standard metropolitan statistical area

URBAN -- location of individual in a ranked SMSA = 1, non ranked or rural = 0

STATE -- state of residence.

From the 160,799 observations, we chose those respondents who were presently employed. Because this set contained many casual workers, we further limited our sample to those who reported working more than 35 hours the previous week, who were employed more than 35 hours per week the previous year, and who reported working more than 30 weeks the previous year. This provided a sample of 39,036 observations. However, a number of anomolies were discovered in the data that required further restrictions on the sample.

Most important for the study at hand, we found that over half of all people (teachers included) reported that their weeks of work were 52. When we contacted the Department of Labor, we found out that the interviewers do not prompt the respondents to clarify whether this means weeks of employment or actual weeks worked. Hence, the sample includes both types of answers. This is particularly troubling because, for salaried people, the hourly wage must be computed. For this reason we used the May CPS data source in connection with March. The May survey reports average weekly earnings from which an hourly wage can be computed without regard to the weeks variable. Moreover, the weeks variable can be computed more accurately using the two data sources. Thus, we adopted the following convention:

1) WEEKS = WAGES/SALARY

2) If WEEKS > 52 then hourly wage (HRWAGE) = WAGES/(HOURS·52)

3) If WEEKS > 52, then WEEKS = 52

As there is no respondent identifier on these tapes, it was necessary to match individuals from tape to tape using a household identifier and reported demographic information. The variables used for this purpose included race, sex, veteran status, education, age, relationship to head of household, marital status, and occupation. This draws a coarser net than might be used, but, with degrees of freedom in surplus, it assures that we only include truly tracked individuals. By cross checking several categories, we did allow for birthdays, marriages, divorces, and deaths between the surveys. Excluding all nonmatches leaves a sample of over 9000 fulltime workers including nearly five hundred public elementary and high school teachers.

## IV. CLASSROOM TEACHER COMPENSATION: SALARIES AND FRINGE BENEFITS

Total teacher compensation is comprised of salary and fringe benefits. In this section, we present the values of fringe benefits available to teachers in the southeastern states along with typical salaries paid. In all except the case of estimates of the value of summer leisure, fringe benefits are valued at the cost to the employer. All data are for the school year 1984-85. An attempt was made to keep separate the state and local contributions to salary and the set of fringe benefits provided to teachers. A word of caution is in order here. We are least satisfied with our ability to make this separation and, while we are confident of total salaries and total fringe benefits, we urge special caution when interpreting or considering the breakdown between state and local responsibility for expenditures. One should use these particular figures only as a rough guide to the relative separation of expenditure responsibility between state and local districts. Many respondents (to the questionnaire and our telephone calls) were quite unsure of whether the state paid certain benefits, such as unemployment and workers' compensation, or whether the local district paid them, with or without later reimbursement from the state. Oftentimes, state and local funds are mixed into "a single pot," as in Arkansas, before the spending process begins. Still, we believe that the breakdown of expenditure responsibility between levels of government is useful and the data are presented in the following tables in a fashion that is as accurate as the data we could obtain.

We should also note that the variation of funding systems and philosophies across states is great. Some states essentially pay teacher

salaries and certain fringe benefits directly, like North Carolina; others use extremely complicated per-pupil formulae. Some states, like Tennessee, allocate funds by educational program or service delivered (so much for remedial programs, transportation, etc.). Others allocate a constant amount per teacher hired. Some state systems think of the local districts as the primary providers of educational services and simply assist them. Some try to equalize local resources and local teacher salaries, while others encourage local districts to add supplements of all kinds that cause teacher salaries and benefits to vary widely.

Salary and fringe benefit values excluding the value of summer leisure are presented in Tables 4-A through 4-J. These tables differ only according to teacher experience and educational level: Table 4-A is for the beginning teacher, Tables 4-B through 4-F are for intermediate teachers with ten years of teacher experience and various educational levels, and Tables 4-G through 4-J are for the experienced teacher with twenty years of service and various levels of educational attainment.

Tables 5-A through 5-J have exactly the same breakdown according to teacher classifications as the first set of tables, but present estimates of the minimum and maximum value of summer leisure, as well as a mean value, and include this with the value of non-summer fringe benefits to get "total fringe benefits with summer" and "total compensation with summer."

Table 6 is a summary table (compressing the data from the preceding sets of tables) showing the mean values for typical salaries, total

fringe benefits including summer, and total compensation including the mean value of summer leisure across all teacher classifications by state and for the region as a whole.

Before these tables are presented, each of the main items contained in them is explained below.

Definitions/Calculation Methods for Fringe Benefits in Tables 4 through 6

**Typical State Contribution to Salary** is column (1) in Tables 4-A through 4-J and represents our best estimate of actual salary dollars supplied by the state. We again remind the reader of our earlier caution concerning the difficulty of apportioning responsibility for teacher salaries between the state government and local districts in some states. Our calculation methodology differs by state. For example, Alabama allots money to local districts for teacher salaries based on educational level alone, $17,711 for a bachelor's degree regardless of experience, $20,342 for a master's degree, and $21,726 for a specialist's or doctoral degree for the year 1984-85. These are the appropriate figures that appear for Alabama. Arkansas, however, supplies money to local districts on a "minimum foundation" basis and sets no minimum salary schedules. In this case, especially since local districts in Arkansas think in terms of a shared pool for school expenses, we simply averaged for the local districts surveyed the percentage of their total funds that came from the state, which turned out to be 77%, and applied that factor to the average of their three salaries paid to teachers in each classification. Hence, the $11,883 state contribution by Arkansas for beginning teachers (Table 4-A) is 77% of the average beginning

teacher salary in the three districts surveyed. The third method used was to allocate as the state's share of salaries the amount shown on a state mandated minimum salary schedule if we felt the state intended to supply that amount of salary and allowed local districts to add to it, but did not require the locality to make up a portion of the minimum amount.

**Typical Local Contributions to Salary** is column (2) of Tables 4-A through 4-J. It is typical because it is an average of only three representative local districts from the low, middle, and high segments of the salary continuum. It is not a weighted average of salary supplements paid in all districts or paid to all teachers. In all cases, the local contribution is equal to the difference between the average of the actual total salary paid in each of the three districts surveyed and the state contribution to salary calculated earlier.

**Typical Salary** is column (3) of Tables 4-A through 4-J and for each state is the sum of the contributions to salary by the state and local districts found in columns (1) and (2). Remember, these are typical salaries found in representative districts for each state and will not match state average salaries, though the figures should be quite similar.

**State Paid Fringe Benefits** are shown in column (4) of Tables 4-A through 4-J. These are calculated on the basis of what they cost the state per teacher directly or indirectly through appropriation or reimbursement. The benefits include state paid employer portions of social security, retirement, health insurance, disability insurance, life insurance, unemployment and workers' compensation funds, and the value of leave days calculated at the daily salary rate.

**Locally Paid Fringe Benefits** comprise column (5) of Tables 4-A through 4-J and consist of the same general items as those noted just above. These are also calculated in the same manner.

**Total Fringe Benefit Value** is found in column (6) of Tables 4-A through 4-J and is the sum of state paid and locally paid fringe benefits, columns (4) and (5). This total does not include a value for summer leisure.

**Total Compensation** is column (8) and is the sum of typical salary (3) and total fringe benefit value (6). This is the total compensation of teachers, exclusive of any value received from having free time in summers.

**Total Fringe Benefits without Summer** is column (1) of Tables 5-A through 5-J and is identical to column (6), Total Fringe Benefit Value, in Tables 1 through 10.

**Minimum Value of Summer Leisure** is column (2) of Tables 5-A through 5-J. It follows the concept that free time in the summer is worth something, as was indicated by the empirical tests in the last section. The opportunity cost to teachers of summer leisure must be at least the minimum wage. Because teachers could choose to earn at that rate and give up their free time, then it must be worth at least that amount or more, if they accept the leisure. The specific amounts by state are calculated as follows, yielding constant values for use throughout the tables since, for the minimum, we assumed no variation in earning power with respect to differences in salary related to educational attainment or experience:

Min Val [200-day contract] = 40 days (8 hours)($3.35/hour) = $1,072

Min Val [190-day contract] = 50 days (8 hours)($3.35/hour) = $1,340

Min Val [185-day contract] = 55 days (8 hours)($3.35/hour) = $1,474

Min Val [180-day contract] = 60 days (8 hours)($3.35/hour) = $1,608

**Maximum Value of Summer Leisure** is column (3) of the second set of tables and is only a little more complicated to estimate. The concept, taken from the theoretical and empirical section on valuing summer leisure, is that the maximum value of the leisure is equal to the opportunity cost of the summer to teachers. That cost is the maximum wages foregone by choosing an occupation with summer leisure. In equilibrium and at the margin, the total wages foregone are equal to the possible summer pay at a non-premium rate (since, when working a full year, no premium would be paid for a restricted work period) less the total premium pay (9.9% of current salary) now being earned during the nine months that would be lost by going to a twelve month regular schedule. So, the maximum value of summer leisure for a teacher on a regular nine-month contract, $MVSL_9$, is

$MVSL_9$=.3333[current salary - .099(current salary)] -.099(current salary)
=.2013(current nine-month "typical salary")

Similarly, the values for other contract lengths are

$MVSL_{9.25}$=.1689(current "typical salary"),

$MVSL_{9.5}$ =.1381(current "typical salary"), and

$MVSL_{10}$ =.0812(current "typical salary").

**Mean Value of Summer Leisure** is column (4) of Tables 5-A through 5-J and is the average of the minimum and maximum values of summer leisure to teachers presented in columns (2) and (3), respectively. This is the value of summer leisure actually used in succeeding estimates of total fringe benefits and total compensation that include the value to teachers of time off in the summer.

**Total Fringe Benefits Including Mean Value of Summer** is column (5) and is the sum by state of all other fringe benefits, column (1), and the mean value of summer, column (4).

**Total Compensation Including Summer** is column (8) and is comprised of typical salary, column (7), and total fringe benefits including the value of summer leisure, column (5). This is the figure that is comparable to estimates of total compensation for private industry.

TABLE 4-A

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 0 ADDITIONAL HOURS AND ZERO YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 17,711 | -1,915 | 15,796 | 3,927 | 121 | 4,048 | 10 | 19,844 | 7 | 25.6 |
| AR | 11,883 | 3,549 | 15,432 | 4,162 | 639 | 4,801 | 7 | 20,233 | 5 | 31.1 |
| FL | 9,601 | 5,169 | 14,770 | 3,556 | 1,914 | 5,470 | 2 | 20,240 | 4 | 37.0 |
| GA | 14,329 | 1,535 | 15,864 | 3,884 | 1,445 | 5,129 | 4 | 20,993 | 2 | 32.3 |
| KY | 14,170 | 423 | 14,593 | 3,315 | 663 | 3,978 | 11 | 18,571 | 11 | 27.3 |
| LA | 12,038 | 3,431 | 15,469 | 4,415 | 405 | 4,820 | 6 | 20,289 | 3 | 31.2 |
| MS | 11,475 | 500 | 11,975 | 2,286 | 688 | 2,974 | 12 | 14,949 | 12 | 24.8 |
| NC | 15,680 | 377 | 16,057 | 7,011 | 198 | 7,209 | 1 | 23,266 | 1 | 44.9 |
| SC | 14,172 | 884 | 14,856 | 4,075 | 75 | 4,150 | 9 | 19,006 | 10 | 27.9 |
| TN | 12,130 | 2,275 | 14,405 | 4,141 | 801 | 4,942 | 5 | 19,347 | 9 | 34.3 |
| VA | 8,949 | 7,836 | 14,785 | 2,460 | 2,774 | 5,234 | 3 | 20,019 | 6 | 35.4 |
| WV | 13,055 | 1,725 | 14,780 | 4,542 | 236 | 4,778 | 8 | 19,558 | 8 | 32.3 |
| REGION | 12,766 | 2,132 | 14,899 | 3,965 | 830 | 4,794 | --- | 19,693 | --- | 32.2 |

TABLE 4-8

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 0 ADDITIONAL HOURS AND TEN YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 17,711 | 1,028 | 18,739 | 4,538 | 129 | 4,667 | 11 | 23,406 | 10 | 24.9 |
| AR | 13,701 | 4,092 | 17,793 | 4,706 | 703 | 5,409 | 8 | 23,202 | 11 | 30.4 |
| FL | 12,595 | 8,782 | 19,377 | 4,295 | 2,312 | 6,607 | 2 | 25,984 | 4 | 34.1 |
| GA | 17,050 | 2,640 | 19,699 | 4,448 | 1,858 | 6,302 | 4 | 26,001 | 3 | 32.0 |
| KY | 17,750 | 1,023 | 18,773 | 4,081 | 663 | 4,744 | 10 | 23,517 | 9 | 25.3 |
| LA | 15,283 | 3,815 | 19,098 | 5,704 | 405 | 6,109 | 5 | 25,207 | 5 | 32.0 |
| MS | 14,225 | 884 | 15,109 | 2,872 | 754 | 3,626 | 12 | 18,735 | 12 | 24.0 |
| NC | 17,970 | 940 | 18,910 | 9,114 | 198 | 9,312 | 1 | 28,222 | 1 | 49.2 |
| SC | 17,998 | 779 | 18,777 | 4,917 | 75 | 4,992 | 9 | 23,769 | 8 | 26.6 |
| TN | 13,905 | 4,313 | 18,218 | 5,237 | 801 | 6,038 | 6 | 24,256 | 7 | 33.1 |
| VA | 9,272 | 10,455 | 19,727 | 3,086 | 3,480 | 6,566 | 3 | 26,293 | 2 | 33.3 |
| WV | 16,848 | 2,219 | 19,067 | 5,772 | 236 | 6,008 | 7 | 25,075 | 6 | 31.5 |
| REGION | 15,380 | 3,248 | 18,607 | 4,897 | 988 | 5,885 | --- | 24,472 | --- | 31.4 |

TABLE 4-C

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 18 ADDITIONAL HOURS AND TEN YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 17,711 | 1,107 | 18,818 | 4,554 | 128 | 4,682 | 11 | 23,500 | 10 | 24.9 |
| AR | 13,881 | 4,146 | 18,027 | 4,760 | 710 | 5,470 | 8 | 23,497 | 11 | 30.3 |
| FL | 12,595 | 6,782 | 19,377 | 4,295 | 2,312 | 6,607 | 3 | 25,984 | 4 | 34.1 |
| GA | 17,059 | 2,040 | 19,099 | 4,448 | 1,858 | 6,302 | 4 | 26,001 | 3 | 32.0 |
| KY | 17,750 | 1,188 | 18,938 | 4,111 | 663 | 4,774 | 10 | 23,712 | 9 | 25.2 |
| LA | 15,283 | 3,815 | 19,098 | 5,704 | 405 | 6,109 | 6 | 25,207 | 6 | 32.0 |
| MS | 14,225 | 884 | 15,109 | 2,872 | 754 | 3,626 | 12 | 18,735 | 12 | 24.0 |
| NC | 17,970 | 940 | 18,910 | 9,114 | 198 | 9,312 | 1 | 28,222 | 1 | 49.2 |
| SC | 18,707 | 796 | 19,503 | 5,074 | 75 | 5,149 | 9 | 24,652 | 7 | 26.4 |
| TN | 13,905 | 4,470 | 18,375 | 5,282 | 801 | 6,083 | 7 | 24,458 | 8 | 33.1 |
| VA | 9,455 | 10,661 | 20,116 | 3,135 | 3,535 | 6,670 | 2 | 26,786 | 2 | 33.2 |
| WV | 17,495 | 2,284 | 19,759 | 5,071 | 236 | 6,207 | 5 | 25,966 | 5 | 31.4 |
| REGION | 15,503 | 3,308 | 18,811 | 4,943 | 973 | 5,916 | --- | 24,727 | --- | 31.3 |

TABLE 4-D

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 0 ADDITIONAL HOURS AND TEN YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 20,342 | 972 | 21,314 | 5,074 | 135 | 5,209 | 10 | 26,523 | 8 | 24.4 |
| AR | 14,448 | 4,315 | 18,761 | 4,931 | 710 | 5,641 | 8 | 24,402 | 11 | 30.1 |
| FL | 13,765 | 7,412 | 21,177 | 4,584 | 2,468 | 7,052 | 2 | 28,229 | 3 | 33.3 |
| GA | 19,515 | 2,619 | 22,134 | 5,027 | 2,024 | 7,051 | 3 | 29,185 | 2 | 31.9 |
| KY | 19,840 | 979 | 20,819 | 4,418 | 663 | 5,081 | 11 | 25,700 | 10 | 24.6 |
| LA | 18,200 | 3,694 | 19,894 | 5,988 | 405 | 6,391 | 7 | 26,285 | 9 | 32.1 |
| MS | 15,275 | 1,050 | 16,325 | 3,098 | 780 | 3,878 | 12 | 20,203 | 12 | 24.0 |
| NC | 19,630 | 1,087 | 20,697 | 9,924 | 198 | 10,122 | 1 | 30,819 | 1 | 48.9 |
| SC | 20,479 | 841 | 21,320 | 5,463 | 75 | 5,538 | 9 | 26,858 | 6 | 26.0 |
| TN | 15,190 | 4,919 | 20,109 | 5,781 | 801 | 6,582 | 5 | 26,691 | 7 | 33.0 |
| VA | 9,944 | 11,213 | 21,157 | 3,267 | 3,684 | 6,951 | 4 | 28,108 | 4 | 33.0 |
| WV | 18,191 | 2,354 | 20,545 | 6,198 | 236 | 6,432 | 6 | 26,977 | 5 | 31.3 |
| REGION | 16,885 | 3,453 | 20,338 | 5,312 | 1,015 | 6,327 | --- | 26,665 | --- | 31.1 |

TABLE 4-E

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 30 ADDITIONAL HOURS AND TEN YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 21,728 | 987 | 22,713 | 5,363 | 139 | 5,502 | 10 | 28,215 | 7 | 24.2 |
| AR | 14,498 | 4,330 | 18,828 | 4,944 | 732 | 5,676 | 9 | 24,504 | 11 | 30.1 |
| FL | 13,765 | 7,412 | 21,177 | 4,584 | 2,468 | 7,052 | 3 | 28,229 | 8 | 33.3 |
| GA | 21,972 | 2,692 | 24,664 | 5,617 | 2,213 | 7,830 | 2 | 32,494 | 2 | 31.7 |
| KY | 21,520 | 931 | 22,451 | 4,752 | 663 | 5,415 | 11 | 27,866 | 8 | 24.1 |
| LA | 16,657 | 3,710 | 20,367 | 8,154 | 405 | 8,559 | 7 | 28,926 | 10 | 32.2 |
| MS | 16,325 | 1,467 | 17,792 | 3,361 | 823 | 4,184 | 12 | 21,976 | 12 | 23.5 |
| NC | 20,890 | 1,067 | 21,957 | 10,496 | 198 | 10,694 | 1 | 32,651 | 1 | 48.7 |
| SC | 21,896 | 876 | 22,772 | 5,774 | 75 | 5,849 | 8 | 28,621 | 4 | 25.7 |
| TN | 15,190 | 5,129 | 20,319 | 5,841 | 801 | 6,642 | 6 | 26,961 | 9 | 32.7 |
| VA | 10,079 | 11,365 | 21,444 | 3,304 | 3,726 | 7,030 | 4 | 28,474 | 5 | 32.8 |
| WV | 19,491 | 2,444 | 21,935 | 6,595 | 236 | 6,831 | 5 | 28,766 | 3 | 31.1 |
| REGION | 17,834 | 3,534 | 21,368 | 5,566 | 1,040 | 6,606 | --- | 27,974 | --- | 30.9 |

TABLE 4-F

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

DOCTORAL IN EDUCATION DEGREE AND TEN YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 21,726 | 1,187 | 22,913 | 5,405 | 139 | 5,544 | 10 | 28,457 | 8 | 24.2 |
| AR | 14,935 | 4,461 | 19,396 | 5,075 | 747 | 5,822 | 9 | 25,218 | 11 | 30.0 |
| FL | 14,946 | 8,048 | 22,994 | 4,875 | 2,625 | 7,500 | 3 | 30,494 | 4 | 32.6 |
| GA | 24,428 | 2,783 | 27,211 | 6,209 | 2,404 | 8,613 | 2 | 35,824 | 1 | 31.7 |
| KY | 21,520 | 1,235 | 22,755 | 4,808 | 663 | 5,471 | 11 | 28,226 | 9 | 24.0 |
| LA | 17,576 | 3,450 | 21,026 | 6,389 | 405 | 6,794 | 7 | 27,820 | 10 | 32.3 |
| MS | 17,375 | 1,700 | 19,075 | 4,463 | 854 | 5,317 | 12 | 24,392 | 12 | 28.0 |
| NC | 22,160 | 1,067 | 23,227 | 11,072 | 198 | 11,270 | 1 | 34,497 | 2 | 48.5 |
| SC | 24,730 | 217 | 24,947 | 6,253 | 75 | 6,328 | 8 | 31,275 | 3 | 25.3 |
| TN | 17,645 | 5,302 | 22,947 | 6,597 | 801 | 7,398 | 4 | 30,345 | 5 | 32.2 |
| VA | 10,214 | 11,517 | 21,731 | 3,340 | 3,766 | 7,106 | 5 | 28,837 | 7 | 33.0 |
| WV | 20,138 | 2,489 | 22,627 | 6,794 | 236 | 7,030 | 6 | 29,657 | 6 | 31.1 |
| REGION | 18,949 | 3,621 | 22,571 | 5,940 | 1,078 | 7,018 | --- | 29,587 | --- | 31.1 |

TABLE 4-G

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR DEGREE + 18 ADDITIONAL HOURS AND TWENTY YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 17,711 | 1,868 | 19,579 | 4,713 | 130 | 4,843 | 11 | 24,422 | 11 | 24.7 |
| AR | 14,821 | 4,427 | 19,248 | 5,041 | 743 | 5,784 | 8 | 25,032 | 9 | 30.0 |
| FL | 15,265 | 8,219 | 23,484 | 4,954 | 2,667 | 7,621 | 3 | 31,105 | 3 | 32.5 |
| GA | 19,106 | 2,969 | 22,075 | 4,966 | 2,066 | 7,032 | 4 | 29,107 | 4 | 31.9 |
| KY | 17,750 | 2,251 | 20,001 | 4,305 | 663 | 4,968 | 10 | 24,869 | 10 | 24.8 |
| LA | 15,283 | 5,709 | 20,992 | 6,376 | 405 | 6,781 | 5 | 27,773 | 6 | 32.3 |
| MS | 15,325 | 1,075 | 16,400 | 3,112 | 783 | 3,895 | 12 | 20,295 | 12 | 23.7 |
| NC | 21,530 | 1,310 | 22,840 | 11,707 | 198 | 11,905 | 1 | 34,745 | 1 | 52.1 |
| SC | 21,428 | 864 | 22,292 | 5,672 | 75 | 5,747 | 9 | 28,039 | 5 | 25.8 |
| TN | 14,810 | 5,251 | 20,061 | 5,767 | 801 | 6,568 | 7 | 26,629 | 7 | 32.7 |
| VA | 11,149 | 12,572 | 23,721 | 3,592 | 4,051 | 7,643 | 2 | 31,364 | 2 | 32.2 |
| WV | 18,648 | 2,399 | 21,045 | 6,340 | 238 | 6,578 | 6 | 27,621 | 8 | 31.2 |
| REGION | 16,902 | 4,076 | 20,978 | 5,546 | 1,068 | 6,614 | --- | 27,592 | --- | 31.5 |

TABLE 4-H

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 0 ADDITIONAL HOURS AND TWENTY YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 20,342 | 1,733 | 22,075 | 5,230 | 137 | 5,367 | 10 | 27,442 | 9 | 24.3 |
| AR | 15,395 | 4,599 | 19,994 | 5,213 | 764 | 5,977 | 9 | 25,971 | 11 | 29.9 |
| FL | 16,435 | 8,049 | 24,484 | 5,243 | 2,823 | 8,066 | 3 | 32,550 | 4 | 32.9 |
| GA | 21,972 | 3,194 | 25,166 | 5,669 | 2,312 | 7,981 | 4 | 33,147 | 3 | 31.7 |
| KY | 19,640 | 2,207 | 21,847 | 4,842 | 663 | 5,305 | 11 | 27,152 | 10 | 24.3 |
| LA | 16,657 | 5,484 | 22,141 | 6,785 | 405 | 7,190 | 5 | 29,331 | 7 | 32.5 |
| MS | 17,075 | 1,317 | 18,392 | 3,484 | 825 | 4,309 | 12 | 22,701 | 12 | 23.4 |
| NC | 23,660 | 1,397 | 25,057 | 12,774 | 198 | 12,972 | 1 | 38,029 | 1 | 51.8 |
| SC | 23,455 | 915 | 24,370 | 6,117 | 75 | 6,192 | 8 | 30,562 | 5 | 25.4 |
| TN | 16,185 | 5,789 | 21,974 | 6,029 | 801 | 6,830 | 7 | 28,804 | 8 | 31.0 |
| VA | 12,185 | 13,740 | 25,925 | 3,871 | 4,366 | 8,237 | 2 | 34,162 | 2 | 31.8 |
| WV | 20,493 | 2,625 | 23,118 | 6,935 | 236 | 7,171 | 6 | 30,289 | 6 | 31.0 |
| REGION | 18,625 | 4,254 | 22,879 | 6,000 | 1,134 | 7,134 | --- | 30,012 | --- | 31.2 |

TABLE 4-I

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 30 ADDITIONAL HOURS AND TWENTY YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 21,728 | 1,748 | 23,474 | 5,521 | 141 | 5,662 | 11 | 29,136 | 10 | 24.1 |
| AR | 15,446 | 4,614 | 20,060 | 5,228 | 766 | 5,994 | 9 | 26,054 | 11 | 29.9 |
| FL | 16,435 | 8,049 | 24,484 | 5,243 | 2,823 | 8,066 | 4 | 32,550 | 5 | 32.9 |
| GA | 24,838 | 3,260 | 28,098 | 6,356 | 2,527 | 8,883 | 2 | 36,981 | 2 | 31.6 |
| KY | 21,520 | 2,489 | 24,009 | 5,036 | 663 | 5,699 | 10 | 29,708 | 8 | 23.7 |
| LA | 17,728 | 5,354 | 23,082 | 7,119 | 405 | 7,524 | 6 | 30,606 | 7 | 32.6 |
| MS | 18,600 | 1,842 | 20,442 | 3,853 | 882 | 4,735 | 12 | 25,177 | 12 | 23.2 |
| NC | 24,920 | 1,397 | 26,317 | 13,382 | 198 | 13,580 | 1 | 39,897 | 1 | 51.6 |
| SC | 24,872 | 949 | 25,821 | 6,428 | 75 | 6,503 | 8 | 32,324 | 6 | 25.1 |
| TN | 16,185 | 6,103 | 22,288 | 6,409 | 801 | 7,210 | 7 | 29,498 | 9 | 32.3 |
| VA | 12,410 | 13,995 | 26,405 | 3,932 | 4,434 | 8,366 | 3 | 34,771 | 3 | 31.7 |
| WV | 22,944 | 2,850 | 25,794 | 7,703 | 236 | 7,939 | 5 | 33,733 | 4 | 30.8 |
| REGION | 19,802 | 4,388 | 24,190 | 6,351 | 1,163 | 7,513 | --- | 31,703 | --- | 30.8 |

TABLE 4-J

SALARY AND FRINGE BENEFIT VALUES EXCLUDING VALUE OF SUMMER LEISURE

FOR TEACHERS WITH

DOCTORAL DEGREE IN EDUCATION AND TWENTY YEARS EXPERIENCE

| State | Typical State Contribution to Salary (1) | Typical Local Contribution to Salary (2) | Typical Salary (3) | State Paid F.B. (4) | Locally Paid F.B. (5) | Total F.B. Value (6) | State Rank by Total F.B. Value (7) | Total Compensation (8) | State Rank by Total Compensation (9) | Total F.B. as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 21,720 | 1,948 | 23,674 | 5,563 | 141 | 5,704 | 11 | 29,378 | 10 | 24.0 |
| AR | 15,901 | 4,750 | 20,651 | 5,364 | 782 | 6,146 | 9 | 26,797 | 12 | 29.8 |
| FL | 17,615 | 9,485 | 27,100 | 5,534 | 2,980 | 8,514 | 3 | 35,614 | 4 | 31.4 |
| GA | 27,703 | 3,357 | 31,060 | 7,045 | 2,740 | 9,785 | 2 | 40,845 | 2 | 31.5 |
| KY | 21,520 | 2,957 | 24,477 | 5,122 | 663 | 5,785 | 10 | 30,262 | 9 | 23.6 |
| LA | 18,471 | 5,301 | 23,772 | 7,364 | 405 | 7,769 | 7 | 31,541 | 8 | 32.7 |
| MS | 19,825 | 2,084 | 21,909 | 4,124 | 916 | 5,040 | 12 | 26,949 | 11 | 23.0 |
| NC | 26,190 | 1,397 | 27,587 | 13,994 | 198 | 14,192 | 1 | 41,779 | 1 | 51.4 |
| SC | 28,698 | 217 | 28,915 | 7,095 | 75 | 7,170 | 8 | 36,085 | 3 | 24.8 |
| TN | 18,635 | 6,600 | 25,235 | 7,254 | 801 | 8,055 | 6 | 33,290 | 6 | 31.9 |
| VA | 12,635 | 14,249 | 26,884 | 3,993 | 4,503 | 8,496 | 4 | 35,380 | 5 | 31.6 |
| WV | 23,591 | 2,895 | 26,486 | 7,901 | 236 | 8,137 | 5 | 34,623 | 7 | 30.7 |
| REGION | 21,042 | 4,603 | 25,646 | 6,697 | 1,203 | 7,899 | --- | 33,546 | --- | 30.8 |

TABLE 5-A

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE • 0 ADDITIONAL HOURS AND ZERO YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 4,048 | 1,608 | 3,180 | 2,394 | 6,442 | 9 | 15,796 | 22,238 | 7 | 40.8 |
| AR | 4,801 | 1,474 | 2,608 | 2,040 | 6,841 | 7 | 15,432 | 22,273 | 6 | 44.3 |
| FL | 5,470 | 1,608 | 2,973 | 2,291 | 7,761 | 2 | 14,770 | 22,531 | 4 | 52.5 |
| GA | 5,129 | 1,340 | 2,191 | 1,766 | 6,895 | 6 | 15,864 | 22,759 | 2 | 43.5 |
| KY | 3,078 | 1,474 | 2,465 | 1,970 | 5,048 | 10 | 14,593 | 20,541 | 11 | 40.8 |
| LA | 4,820 | 1,608 | 3,114 | 2,361 | 7,181 | 5 | 15,469 | 22,650 | 3 | 46.4 |
| MS | 2,974 | 1,608 | 2,411 | 2,010 | 4,984 | 12 | 11,975 | 16,959 | 12 | 41.6 |
| NC | 7,209 | 1,608 | 3,232 | 2,420 | 9,629 | 1 | 16,057 | 25,686 | 1 | 60.0 |
| SC | 4,150 | 1,608 | 2,991 | 2,300 | 6,450 | 8 | 14,858 | 21,308 | 9 | 43.4 |
| TN | 4,942 | 1,608 | 2,900 | 2,254 | 7,196 | 4 | 14,405 | 21,601 | 8 | 50.0 |
| VA | 5,234 | 1,608 | 2,976 | 2,292 | 7,526 | 3 | 14,785 | 22,311 | 5 | 50.9 |
| WV | 4,778 | 1,072 | 1,200 | 1,136 | 5,914 | 11 | 14,780 | 20,694 | 10 | 40.0 |
| REGION | 4,795 | 1,519 | 2,687 | 2,103 | 6,897 | --- | 14,899 | 21,796 | --- | 46.3 |

TABLE 5-B

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 0 ADDITIONAL HOURS AND TEN YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 4,667 | 1,808 | 3,772 | 2,690 | 7,357 | 9 | 18,739 | 26,096 | 8 | 39.3 |
| AR | 5,409 | 1,474 | 3,005 | 2,240 | 7,649 | 8 | 17,793 | 25,442 | 10 | 43.0 |
| FL | 6,607 | 1,808 | 3,901 | 2,755 | 9,362 | 2 | 19,377 | 28,739 | 3 | 48.3 |
| GA | 6,302 | 1,340 | 2,720 | 2,030 | 8,332 | 6 | 19,699 | 28,031 | 4 | 42.3 |
| KY | 4,744 | 1,474 | 3,171 | 2,323 | 7,067 | 11 | 18,773 | 25,840 | 9 | 37.6 |
| LA | 6,109 | 1,808 | 3,844 | 2,726 | 8,835 | 4 | 19,098 | 27,933 | 12 | 46.3 |
| MS | 3,626 | 1,808 | 3,041 | 2,325 | 5,951 | 12 | 15,109 | 21,060 | 11 | 33.4 |
| NC | 9,312 | 1,808 | 3,807 | 2,708 | 12,020 | 1 | 18,910 | 30,930 | 1 | 63.6 |
| SC | 4,992 | 1,808 | 3,780 | 2,694 | 7,686 | 7 | 18,777 | 26,463 | 6 | 40.9 |
| TN | 6,038 | 1,808 | 3,867 | 2,837 | 8,876 | 5 | 18,218 | 26,894 | 5 | 47.6 |
| VA | 6,566 | 1,808 | 3,971 | 2,790 | 9,356 | 3 | 19,727 | 29,083 | 2 | 47.4 |
| WV | 6,008 | 1,072 | 1,548 | 1,310 | 7,318 | 10 | 19,067 | 26,385 | 7 | 38.4 |
| REGION | 5,865 | 1,519 | 3,352 | 2,436 | 8,301 | --- | 18,607 | 26,908 | --- | 44.6 |

TABLE 5-C

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 18 ADDITIONAL HOURS AND TEN YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 4,682 | 1,608 | 3,788 | 2,698 | 7,380 | 10 | 18,818 | 26,198 | 10 | 39.2 |
| AR | 5,470 | 1,474 | 3,045 | 2,260 | 7,730 | 8 | 18,027 | 25,757 | 8 | 42.9 |
| FL | 6,607 | 1,608 | 3,901 | 2,755 | 9,362 | 3 | 19,377 | 28,739 | 3 | 48.3 |
| GA | 6,302 | 1,340 | 2,720 | 2,030 | 8,332 | 6 | 19,699 | 28,031 | 4 | 42.3 |
| KY | 4,774 | 1,474 | 3,187 | 2,331 | 7,105 | 11 | 18,938 | 26,043 | 11 | 37.7 |
| LA | 6,109 | 1,608 | 3,844 | 2,726 | 8,835 | 4 | 19,098 | 27,933 | 5 | 46.3 |
| MS | 3,626 | 1,608 | 3,041 | 2,325 | 5,951 | 12 | 15,109 | 21,060 | 12 | 39.4 |
| NC | 9,312 | 1,608 | 3,807 | 2,708 | 12,020 | 1 | 18,910 | 30,930 | 1 | 63.6 |
| SC | 5,149 | 1,608 | 3,926 | 2,767 | 7,916 | 7 | 19,503 | 27,419 | 7 | 40.6 |
| TN | 6,083 | 1,608 | 3,699 | 2,654 | 8,737 | 5 | 18,375 | 27,112 | 9 | 47.5 |
| VA | 8,670 | 1,608 | 4,069 | 2,839 | 9,509 | 2 | 20,116 | 29,725 | 2 | 47.3 |
| WV | 6,207 | 1,072 | 1,604 | 1,338 | 7,545 | 9 | 19,759 | 27,304 | 8 | 38.2 |
| REGION | 5,916 | 1,519 | 3,386 | 2,452 | 8,369 | --- | 18,811 | 27,188 | --- | 44.3 |

TABLE 5-D

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 0 ADDITIONAL HOURS AND TEN YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,209 | 1,608 | 4,291 | 2,950 | 8,159 | 8 | 21,314 | 29,473 | 7 | 38.3 |
| AR | 5,641 | 1,474 | 3,169 | 2,322 | 7,963 | 9 | 18,761 | 26,724 | 11 | 42.4 |
| FL | 7,052 | 1,608 | 4,263 | 2,936 | 9,988 | 2 | 21,177 | 31,165 | 3 | 47.2 |
| GA | 7,051 | 1,340 | 3,057 | 2,199 | 9,250 | 5 | 22,134 | 31,384 | 2 | 41.8 |
| KY | 5,081 | 1,474 | 3,483 | 2,479 | 7,560 | 11 | 20,619 | 28,179 | 10 | 36.7 |
| LA | 6,391 | 1,608 | 4,005 | 2,807 | 9,198 | 6 | 19,894 | 29,092 | 8 | 46.2 |
| MS | 3,878 | 1,608 | 3,286 | 2,447 | 6,325 | 12 | 16,325 | 22,650 | 12 | 38.7 |
| NC | 10,122 | 1,608 | 4,166 | 2,887 | 13,009 | 1 | 20,697 | 33,706 | 1 | 62.9 |
| SC | 5,536 | 1,608 | 4,292 | 2,950 | 8,486 | 7 | 21,320 | 29,806 | 5 | 39.8 |
| TN | 6,582 | 1,608 | 4,046 | 2,828 | 9,410 | 4 | 20,109 | 29,519 | 6 | 46.8 |
| VA | 6,951 | 1,608 | 4,259 | 2,934 | 9,885 | 3 | 21,157 | 31,042 | 4 | 46.7 |
| WV | 6,432 | 1,072 | 1,868 | 1,370 | 7,802 | 10 | 20,545 | 28,347 | 9 | 38.0 |
| REGION | 6,327 | 1,519 | 3,666 | 2,592 | 8,920 | --- | 20,338 | 29,257 | --- | 43.8 |

TABLE 5-E

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS IN EDUCATION DEGREE + 30 ADDITIONAL HOURS AND TEN YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,502 | 1,608 | 4,572 | 3,090 | 8,592 | 8 | 22,713 | 31,305 | 5 | 37.8 |
| AR | 5,676 | 1,474 | 3,180 | 2,327 | 8,003 | 11 | 18,828 | 26,831 | 11 | 42.5 |
| FL | 7,052 | 1,608 | 4,263 | 2,936 | 9,988 | 4 | 21,177 | 31,165 | 6 | 47.2 |
| GA | 7,830 | 1,340 | 3,406 | 2,373 | 10,203 | 2 | 24,664 | 34,867 | 2 | 41.4 |
| KY | 5,415 | 1,474 | 3,792 | 2,633 | 8,048 | 10 | 22,451 | 30,499 | 7 | 35.9 |
| LA | 6,559 | 1,608 | 4,100 | 2,854 | 9,413 | 6 | 20,367 | 29,780 | 10 | 46.2 |
| MS | 4,184 | 1,608 | 3,582 | 2,595 | 6,779 | 12 | 17,792 | 24,571 | 12 | 38.1 |
| NC | 10,694 | 1,608 | 4,420 | 3,014 | 13,708 | 1 | 21,957 | 35,665 | 1 | 62.4 |
| SC | 5,849 | 1,608 | 4,584 | 3,096 | 8,945 | 7 | 22,772 | 31,717 | 3 | 39.3 |
| TN | 6,642 | 1,608 | 4,090 | 2,849 | 9,491 | 5 | 20,319 | 29,810 | 9 | 46.7 |
| VA | 7,030 | 1,608 | 4,317 | 2,963 | 9,993 | 3 | 21,444 | 31,437 | 4 | 46.6 |
| WV | 6,831 | 1,072 | 1,781 | 1,427 | 8,258 | 9 | 21,935 | 30,193 | 8 | 37.6 |
| REGION | 6,606 | 1,519 | 3,841 | 2,680 | 9,285 | --- | 21,368 | 30,654 | --- | 43.5 |

TABLE 5-F

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

DOCTORAL DEGREE AND TEN YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,544 | 1,608 | 4,612 | 3,110 | 8,654 | 8 | 22,913 | 31,567 | 7 | 37.8 |
| AR | 5,822 | 1,474 | 3,276 | 2,375 | 8,197 | 10 | 19,396 | 27,593 | 11 | 42.3 |
| FL | 7,500 | 1,608 | 4,629 | 3,119 | 10,619 | 3 | 22,994 | 33,613 | 4 | 46.2 |
| GA | 8,613 | 1,340 | 3,758 | 2,549 | 11,162 | 2 | 27,211 | 38,373 | 1 | 41.0 |
| KY | 5,471 | 1,474 | 3,843 | 2,659 | 8,130 | 11 | 22,755 | 30,889 | 9 | 35.7 |
| LA | 6,794 | 1,608 | 4,233 | 2,921 | 9,715 | 6 | 21,026 | 30,741 | 10 | 46.2 |
| MS | 5,317 | 1,608 | 3,840 | 2,724 | 8,041 | 12 | 19,075 | 27,116 | 12 | 42.2 |
| NC | 11,270 | 1,608 | 4,676 | 3,142 | 14,412 | 1 | 23,227 | 37,639 | 2 | 62.0 |
| SC | 6,328 | 1,608 | 5,022 | 3,315 | 9,643 | 7 | 24,947 | 34,590 | 3 | 38.7 |
| TN | 7,398 | 1,608 | 4,619 | 3,114 | 10,512 | 4 | 22,947 | 33,459 | 5 | 45.8 |
| VA | 7,106 | 1,608 | 4,374 | 2,991 | 10,097 | 5 | 21,791 | 31,828 | 6 | 46.5 |
| WV | 7,030 | 1,072 | 1,837 | 1,455 | 8,485 | 9 | 22,627 | 31,112 | 8 | 37.5 |
| REGION | 7,018 | 1,519 | 4,060 | 2,789 | 9,806 | --- | 22,571 | 32,377 | --- | 43.5 |

TABLE 5-G

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

BACHELOR'S DEGREE + 18 ADDITIONAL HOURS AND TWENTY YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 4,843 | 1,608 | 3,941 | 2,775 | 7,618 | 10 | 19,579 | 27,197 | 11 | 38.9 |
| AR | 5,784 | 1,474 | 3,251 | 2,363 | 8,147 | 8 | 19,248 | 27,395 | 9.5 | 42.3 |
| FL | 7,621 | 1,608 | 4,727 | 3,168 | 10,789 | 3 | 23,484 | 34,273 | 3 | 45.9 |
| GA | 7,032 | 1,340 | 3,049 | 2,195 | 9,227 | 6 | 22,075 | 31,302 | 4 | 41.8 |
| KY | 4,968 | 1,474 | 3,378 | 2,426 | 7,394 | 11 | 20,001 | 27,395 | 9.5 | 37.0 |
| LA | 6,781 | 1,608 | 4,226 | 2,917 | 9,698 | 4 | 20,992 | 30,690 | 6 | 46.2 |
| MS | 3,895 | 1,608 | 3,301 | 2,455 | 6,350 | 12 | 16,400 | 22,750 | 12 | 38.7 |
| NC | 11,905 | 1,608 | 4,598 | 3,103 | 15,008 | 1 | 22,840 | 37,848 | 1 | 65.7 |
| SC | 5,747 | 1,608 | 4,487 | 3,048 | 8,795 | 7 | 22,292 | 31,087 | 5 | 39.5 |
| TN | 6,568 | 1,608 | 4,038 | 2,823 | 9,391 | 5 | 20,061 | 29,452 | 7 | 46.8 |
| VA | 7,643 | 1,608 | 4,775 | 3,192 | 10,835 | 2 | 23,721 | 34,556 | 2 | 45.7 |
| WV | 6,576 | 1,072 | 1,709 | 1,391 | 7,967 | 9 | 21,045 | 29,012 | 8 | 37.9 |
| **REGION** | 6,614 | 1,519 | 3,790 | 2,654 | 9,268 | --- | 20,978 | 30,247 | --- | 44.2 |

TABLE 5-H

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS DEGREE + 0 ADDITIONAL HOURS AND TWENTY YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,367 | 1,608 | 4,444 | 3,026 | 8,393 | 10 | 22,075 | 30,468 | 9 | 38.0 |
| AR | 5,977 | 1,474 | 3,377 | 2,426 | 8,403 | 9 | 19,994 | 28,397 | 11 | 42.0 |
| FL | 8,066 | 1,608 | 4,929 | 3,269 | 11,335 | 3 | 24,484 | 35,819 | 3 | 46.3 |
| GA | 7,981 | 1,340 | 3,475 | 2,408 | 10,389 | 4 | 25,166 | 35,555 | 4 | 40.0 |
| KY | 5,305 | 1,474 | 3,690 | 2,582 | 7,887 | 11 | 21,847 | 29,734 | 10 | 36.1 |
| LA | 7,190 | 1,608 | 4,457 | 3,033 | 10,223 | 5 | 22,141 | 32,364 | 6 | 46.0 |
| MS | 4,309 | 1,608 | 3,702 | 2,655 | 6,964 | 12 | 18,392 | 25,356 | 12 | 38.0 |
| NC | 12,972 | 1,608 | 5,038 | 3,323 | 16,295 | 1 | 25,057 | 41,352 | 1 | 65.0 |
| SC | 6,192 | 1,608 | 4,906 | 3,257 | 9,449 | 7 | 24,370 | 33,819 | 5 | 39.0 |
| TN | 6,830 | 1,608 | 4,423 | 3,016 | 9,846 | 6 | 21,974 | 31,820 | 7 | 45.0 |
| VA | 8,237 | 1,608 | 5,219 | 3,414 | 11,651 | 2 | 25,925 | 37,576 | 2 | 45.0 |
| WV | 7,171 | 1,072 | 1,877 | 1,475 | 8,646 | 8 | 23,118 | 31,764 | 8 | 37.0 |
| REGION | 7,134 | 1,519 | 4,128 | 2,823 | 9,957 | --- | 22,879 | 32,833 | --- | 43.3 |

TABLE 5-I

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

MASTERS DEGREE + 30 ADDITIONAL HOURS AND TWENTY YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,662 | 1,608 | 4,725 | 3,167 | 8,829 | 9 | 23,474 | 32,303 | 10 | 37.6 |
| AR | 5,994 | 1,474 | 3,388 | 2,431 | 8,425 | 11 | 20,060 | 28,485 | 11 | 42.0 |
| FL | 8,066 | 1,608 | 4,929 | 3,269 | 11,335 | 4 | 24,484 | 35,819 | 4 | 46.3 |
| GA | 8,883 | 1,340 | 3,880 | 2,610 | 11,493 | 3 | 28,098 | 39,591 | 2 | 40.9 |
| KY | 5,699 | 1,474 | 4,055 | 2,765 | 8,464 | 10 | 24,009 | 32,473 | 9 | 35.3 |
| LA | 7,524 | 1,608 | 4,646 | 3,127 | 10,651 | 5 | 23,082 | 33,733 | 7 | 46.1 |
| MS | 4,735 | 1,608 | 4,115 | 2,862 | 7,597 | 12 | 20,442 | 28,039 | 12 | 37.2 |
| NC | 13,580 | 1,608 | 5,298 | 3,453 | 17,033 | 1 | 26,317 | 43,350 | 1 | 64.7 |
| SC | 6,503 | 1,608 | 5,198 | 3,403 | 9,906 | 7 | 25,821 | 35,727 | 5 | 38.4 |
| TN | 7,210 | 1,608 | 4,487 | 3,048 | 10,258 | 6 | 22,288 | 32,546 | 8 | 46.0 |
| VA | 8,366 | 1,608 | 5,315 | 3,462 | 11,828 | 2 | 26,405 | 38,233 | 3 | 44.8 |
| WV | 7,939 | 1,072 | 2,094 | 1,583 | 9,522 | 8 | 25,794 | 35,316 | 6 | 36.9 |
| REGION | 7,513 | 1,519 | 4,344 | 2,932 | 10,445 | --- | 24,190 | 34,635 | --- | 43.0 |

TABLE 5-J

TOTAL COMPENSATION INCLUDING ESTIMATED VALUES OF SUMMER LEISURE

FOR TEACHERS WITH

DOCTORAL DEGREE AND TWENTY YEARS OF EXPERIENCE

| State | Total F.B. Without Summer (1) | Minimum Value of Summer Leisure (2) | Maximum Value of Summer Leisure (3) | Mean Value of Summer Leisure (4) | Total F.B. Including Mean Value of Summer (5) | State Rank by Total F.B. with Summer (6) | Typical Salary (7) | Total Compensation Including Summer (8) | State Rank by Total Comp. Includ. Summer (9) | Total F.B. With Summer as % of Typical Salary (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| AL | 5,704 | 1,608 | 4,766 | 3,187 | 8,891 | 9 | 23,674 | 32,565 | 10 | 37.6 |
| AR | 6,146 | 1,474 | 3,486 | 2,481 | 8,627 | 10 | 20,651 | 29,278 | 12 | 41.8 |
| FL | 8,514 | 1,608 | 5,455 | 3,532 | 12,045 | 3 | 27,100 | 39,146 | 4 | 44.4 |
| GA | 9,785 | 1,340 | 4,289 | 2,815 | 12,600 | 2 | 31,060 | 43,660 | 2 | 40.6 |
| KY | 5,785 | 1,474 | 4,134 | 2,804 | 8,589 | 11 | 24,477 | 33,066 | 9 | 35.1 |
| LA | 7,769 | 1,608 | 4,785 | 3,197 | 10,966 | 6 | 23,773 | 34,736 | 8 | 46.1 |
| MS | 5,040 | 1,608 | 4,410 | 3,009 | 8,049 | 12 | 21,909 | 29,958 | 11 | 36.7 |
| NC | 14,192 | 1,608 | 5,553 | 3,581 | 17,773 | 1 | 27,587 | 45,360 | 1 | 64.4 |
| SC | 7,170 | 1,608 | 5,821 | 3,715 | 10,885 | 7 | 26,915 | 39,800 | 3 | 37.6 |
| TN | 8,055 | 1,608 | 5,080 | 3,344 | 11,399 | 5 | 25,235 | 36,634 | 6 | 45.1 |
| VA | 8,498 | 1,608 | 5,412 | 3,510 | 12,008 | 4 | 26,884 | 38,890 | 5 | 44.7 |
| WV | 6,137 | 1,072 | 2,151 | 1,612 | 9,749 | 8 | 28,488 | 36,235 | 7 | 36.8 |
| REGION | 7,899 | 1,519 | 4,812 | 3,066 | 10,965 | --- | 25,646 | 36,611 | --- | 42.8 |

TABLE 6
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | ALABAMA | | | ARKANSAS | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $28,942 | 100% | 138% | $26,818 | 100% | 143% |
| Total F.B. Including Summer | 8,032 | 28 | 38 | 7,999 | 30 | 43 |
| Mean Value of Summer | 2,909 | 10 | 14 | 2,327 | 9 | 12 |
| State Paid F.B. | 4,989 | 17 | 23 | 4,942 | 18 | 26 |
| Locally Paid F.B. | 134 | 1 | 1 | 730 | 3 | 5 |
| Typical Salary | 20,910 | 72 | 100 | 18,819 | 70 | 100 |
| State Contribution to Salary | 19,843 | 68 | 95 | 14,491 | 54 | 77 |
| Local Contribution to Salary | 1,067 | 4 | 5 | 4,328 | 16 | 23 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | FLORIDA | | | GEORGIA | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $32,100 | 100% | 147% | $33,355 | 100% | 142% |
| Total F.B. Including Summer | 10,258 | 32 | 47 | 9,788 | 29 | 42 |
| Mean Value of Summer | 3,003 | 9 | 14 | 2,298 | 7 | 10 |
| State Paid F.B. | 4,716 | 15 | 21 | 5,347 | 16 | 23 |
| Locally Paid F.B. | 2,539 | 8 | 12 | 2,143 | 6 | 9 |
| Typical Salary | 21,842 | 68 | 100 | 23,567 | 71 | 100 |
| State Contribution to Salary | 14,302 | 45 | 65 | 20,798 | 62 | 88 |
| Local Contribution to Salary | 7,540 | 23 | 35 | 2,769 | 9 | 12 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | KENTUCKY | | | LOUISIANA | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $28,465 | 100% | 137% | $29,966 | 100% | 146% |
| Total F.B. Including Summer | 7,619 | 27 | 37 | 9,472 | 32 | 46 |
| Mean Value of Summer | 2,497 | 9 | 12 | 2,867 | 10 | 14 |
| State Paid F.B. | 4,459 | 15 | 21 | 6,200 | 21 | 30 |
| Locally Paid F.B. | 663 | 3 | 4 | 405 | 1 | 2 |
| Typical Salary | 20,846 | 73 | 100 | 20,494 | 68 | 100 |
| State Contribution to Salary | 19,278 | 68 | 92 | 16,118 | 54 | 79 |
| Local Contribution to Salary | 1,568 | 5 | 8 | 4,376 | 14 | 21 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | MISSISSIPPI | | | NORTH CAROLINA | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $23,952 | 100% | 139% | $36,247 | 100% | 164% |
| Total F.B. Including Summer | 6,699 | 28 | 39 | 14,091 | 39 | 64 |
| Mean Value of Summer | 2,541 | 11 | 15 | 3,034 | 8 | 14 |
| State Paid F.B. | 3,352 | 14 | 19 | 10,859 | 30 | 49 |
| Locally Paid F.B. | 806 | 3 | 5 | 198 | 1 | 1 |
| Typical Salary | 17,253 | 72 | 100 | 22,156 | 61 | 100 |
| State Contribution to Salary | 15,973 | 67 | 93 | 21,061 | 58 | 95 |
| Local Contribution to Salary | 1,280 | 5 | 7 | 1,095 | 3 | 5 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | SOUTH CAROLINA | | | TENNESSEE | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $31,173 | 100% | 139% | $29,885 | 100% | 147% |
| Total F.B. Including Summer | 8,816 | 28 | 39 | 9,492 | 32 | 47 |
| Mean Value of Summer | 3,055 | 10 | 14 | 2,857 | 10 | 14 |
| State Paid F.B. | 5,686 | 18 | 25 | 5,834 | 19 | 29 |
| Locally Paid F.B. | 75 | 0 | 0 | 801 | 3 | 4 |
| Typical Salary | 22,357 | 72 | 100 | 20,393 | 68 | 100 |
| State Contribution to Salary | 21,644 | 70 | 97 | 15,378 | 51 | 75 |
| Local Contribution to Salary | 713 | 2 | 3 | 5,015 | 17 | 25 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES
ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE
AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | VIRGINIA | | | WEST VIRGINIA | | |
|---|---|---|---|---|---|---|
| | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) | Mean of All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $32,458 | 100% | 146% | $29,637 | 100% | 138% |
| Total F.B. Including Summer | 10,268 | 32 | 46 | 8,121 | 27 | 38 |
| Mean Value of Summer | 3,039 | 9 | 14 | 1,410 | | |
| State Paid F.B. | 3,398 | 11 | 15 | 6,475 | 22 | 30 |
| Locally Paid F.B. | 3,831 | 12 | 17 | 236 | 1 | 1 |
| Typical Salary | 22,190 | 68 | 100 | 21,516 | 73 | 100 |
| State Contribution to Salary | 10,429 | 32 | 47 | 19,089 | 64 | 89 |
| Local Contribution to Salary | 11,761 | 36 | 53 | 2,427 | 9 | 11 |

TABLE 6 (Continued)
MEAN VALUES FOR TOTAL COMPENSATION, FRINGE BENEFITS AND TYPICAL SALARIES ACROSS ALL EDUCATIONAL AND EXPERIENCE LEVELS BY STATE AND FOR THE SOUTHEASTERN REGION, 1984-85

| Elements of Teacher Compensation | SOUTHEASTERN REGION | | |
|---|---|---|---|
| | Mean All Ed/Exp Levels (1) | Percent of Total Compensation (2) | Percent of Typical Salary (3) |
| Total Compensation Including Summer | $30,250 | 100% | 144% |
| Total F.B. Including Summer | 9,221 | 30 | 44 |
| Mean Value of Summer | 2,653 | 9 | 13 |
| State Paid F.B. | 5,521 | 18 | 26 |
| Locally Paid F.B. | 1,047 | 3 | 5 |
| Typical Salary | 21,029 | 70 | 100 |
| State Contribution to Salary | 17,367 | 58 | 83 |
| Local Contribution to Salary | 3,662 | 12 | 17 |

## Highlights from Tables of Fringe Benefits and Salaries

Tables 4-A through 4-J contain salary and fringe benefit valuations for 1984-85 by state for each of ten teacher education/experience categories, excluding any value for summer leisure. The typical salary received by beginning teachers in the local districts surveyed ranges from a low of $11,975 in Mississippi to $16,057 in North Carolina, averaging $14,899 for the southeastern region. At the other end of the education/experience spectrum, teachers with a doctoral degree and twenty years of experience receive a low of $21,909 in Mississippi (83 percent more than the beginning teacher) and a high of $31,060 in Georgia (96 percent more than the beginning teacher in that state). For the region, this most experienced teacher category averaged $25,646 or 72 percent more than the beginning teacher in the region.

The above suggests that teacher experience and educational level significantly affect total salary. Table 4-B shows that teachers with ten years of experience, but no more educational attainment than beginning teachers, earn an average of $18,067 in the region or 25% more for the extra ten years experience. Another comparison regarding experience is the 12 percent larger salary earned by teachers in the region with twenty years experience relative to those with ten years, and both having master's degrees (from Table 4-H, $22,879, and Table 4-D, $20,338, respectively). The relative value of years of experience increases much more slowly as higher levels of experience are reached.

Educational attainment raises salaries less rapidly than experience. Teachers with ten years of experience and a bachelor's degree average $18,607 in the region (Table 4-B). With a master's degree and still

ten years of experience, salary only rises to $20,338 (Table 4-D), a 9 percent increase. Still with ten years experience, salary rises to $22,571 with a doctoral degree (Table 4-F), an 11 percent increase over the master's or 21 percent more than the bachelor's degree. The results are similar for the range of education levels of teachers while holding experience constant at twenty years: salary rises at a decreasing rate and less rapidly than for increases in years of experience.

What is clear from the above is that classroom teachers typically gain greater salary increases each year than is apparent in the newspapers when yearly cost of living increases, whether automatic or appropriated each year, are considered along with available step increases that include both additional experience and educational attainment. While the annual overall salary increase for teachers is not overwhelmingly large, and part of the increase must be earned by teachers through extra learning effort off the job, the potential annual rate of increase is important to keep in mind. For example, it is quite normal for teachers to begin teaching with bachelor's degrees and to receive master's degrees within the first ten years. (Some states require a master's degree within that time frame to retain certification.) For 1984-85, the difference in salary for the beginning teacher in the region and one with ten years experience and a master's degree is $5,439, moving from $14,899 to $20,338. This is a compound annual rate of growth of 3.2 percent. When coupled with annual appropriated schedule increases that might average about 4.0 percent per year, the average annual salary increase for teachers in their first ten years in the Southeast is likely to be in the neighborhood of 7.2 percent.

It is interesting to note, however, that of that $5,439 typical salary difference, the lion's share, or $3,708, is for the extra ten years of experience (see Table 4-B) while the remaining $1,731 is for the master's degree. This corroborates the point made above that experience tends to count much more than educational attainment.

Fringe benefits for beginning teachers (Table 4-A), excluding the value of summer leisure, range from $2,974 to $7,209 and average $4,794 for the region. As a percent of typical salary, these benefits range from 24.8 percent to 44.9 percent and average 32.2 percent for the twelve states examined. The figures for teachers with doctoral degrees and twenty years of experience are higher in dollar terms, but are much the same as a percent of salary. The range is from $5,040 to $14,192 with an average of $7,899 (Table 4-J). As a percent of typical salary, the corresponding range is from 23.0 percent to 51.4 percent, averaging 30.8 percent.

It is worth noting here that North Carolina is at the top of the scale in all fringe benefit measures. Excluding that state, fringe benefits range from about 23 to 32 percent. North Carolina's fringe benefits are much higher in value than those in other southeastern states primarily because of two extra benefits, longevity pay and vacations. Vacations for regular teachers range from 10 days (with less than two years of service) to 21.5 days (with twenty or more years of service). Teachers in North Carolina also receive an annual longevity payment based on years of service: from 1.5% of salary with 10 to 15 years of service up to 4.5% of salary with 25 or more years of service.

The mean value of summer leisure as calculated and reported in Tables 5-A through 5-J averages $2,103 for beginning teachers in the region and $3,066 for the top category of teachers. When this benefit is added to other "normal" benefit values, the benefit package for teachers is especially attractive. Total benefits for beginning teachers as a percent of typical salary then range from 40.8 percent in Kentucky to 60.0 percent in North Carolina, with a regional average of 46.3 percent.

At the end of Table 6, the mean values for typical salary, fringe benefits, and total compensation are given for the southeastern region for the mean of all teacher education/experience categories. The average typical salary for 1984-85 is $21,029 for teachers in the region, and the average value of non-summer fringe benefits is $6,568 which is 31 percent of salary. The mean value of summer leisure is another $2,653 or 13 percent of total salary. Thus, total fringe benefits on average in the region are valued at $9,221 or 44% of typical salary.

## Teacher Fringe Benefits Compared to Other Industries

The latest hard data available on fringe benefits offered in other industries is that contained in the latest report of an annual benefits survey conducted by the U.S. Chamber of Commerce entitled Employee Benefits 1983, published in late 1984. As reported in that survey [U.S. Chamber of Commerce, 1984, p. 30], about $550 billion was spent on fringe benefits in all industries in the U.S. for 1983. Benefits, which are equal to more than one-third (36.6 percent in 1983) of payroll dollars, are growing faster than either wages or inflation. For the

period 1973 to 1983, benefits rose 189 percent while wages rose 140 percent and prices 124 percent. Over that period, the annual compound rate of growth in fringe benefits was a phenomenal 11.7 percent.

Table 7 below reports the dollar value of fringe benefits per employee for the nation by industry group for 1983 in column (1). Column (2) shows these benefits as a percent of payroll or salary, and column (3) reports these percentages for firms located in the southeastern region. At the bottom of the table, our figures for teachers in the Southeast for 1984-85 are shown for comparison.

The comparative results are mixed. The value of fringe benefits given teachers in the Southeast, excluding the value of summer leisure, is $6,568 which compares unfavorably with the national average of $7,582 for all industries. This is especially true considering the fact that the industry data is for 1983 while our data is for the 1984-85 academic year. This lag of at least one year in the industry data would make the figure for 1984 be about $8,264, assuming a conservative growth rate of 9 percent. On the other hand, the dollar figures are biased in favor of teachers because the industry data is for a full year. Taking three-quarters of the adjusted industry figure for 1984, we would have a crudely comparable total fringe benefit amount for all industries nationally on a nine-month basis of about $6,198, which is <u>less than</u> what teachers receive in the Southeast with the value of summer leisure excluded.

If we compare the full year figure for teaching, i.e., including the mean value of summer leisure, of $9,221 with the full year figure for all industries adjusted to 1984, $8,264, we find that teachers

TABLE 7

Fringe Benefits by Industry Type for 1983 and for Teachers in the Southeastern Region for 1984-85

| Industry Group | Annual Fringe Benefits Per Employee Nationally 1983 (1) | Fringe Benefits as Percent of Payroll or Salary, 1983 (2) | Southeastern Region's Fringe Benefit as Percent of Payroll or Salary, 1983 (3) |
|---|---|---|---|
| Mean for All Industries | $ 7,582 | 36.6% | 33.9% |
| Mean for Manufacturing | 8,110 | 38.7 | 33.4 |
| Food/Beverage/Tobacco | 7,083 | 36.7 | 29.6 |
| Textiles | 3,968 | 30.5 | 27.8 |
| Pulp/Paper/Lumber/Furniture | 6,656 | 33.3 | 26.5 |
| Printing/Publishing | 8,216 | 37.6 | 33.3 |
| Chemicals | 9,198 | 40.0 | 35.2 |
| Petroleum | 12,122 | 40.7 | 36.4 |
| Rubber/Leather/Plastics | 6,979 | 36.2 | 33.9 |
| Stone/Clay/Glass | 8,112 | 37.9 | NA |
| Primary Metals | 10,422 | 47.1 | 38.4 |
| Fabricated Metal Products | 7,776 | 39.8 | 34.2 |
| Machinery | 9,296 | 40.4 | 38.4 |
| Electrical Machinery | 7,406 | 36.6 | 30.0 |
| Transportation Equipment | 9,794 | 40.9 | 36.4 |
| Instruments | 7,457 | 37.4 | 34.8 |
| Mean for Nonmanufacturing | 7,163 | 34.9 | 34.3 |
| Public Utilities | 10,142 | 40.0 | 39.0 |
| Department Stores | 3,721 | 31.8 | 25.9 |
| Wholesale/Retail Trade | 4,956 | 29.0 | 28.2 |
| Banking/Finance | 6,277 | 35.6 | 35.2 |
| Insurance | 6,833 | 35.8 | 35.3 |
| Hospitals | 5,728 | 31.8 | 29.9 |
| Miscellaneous/Gov't/Education | 7,511 | 32.8 | 30.7 |
| Mean for Southeastern Teachers Without Summer, 1984-85 | 6,568 | 31.2 | 31.2 |
| Mean for Southeastern Teachers With Summer, 1984-85 | 9,221 | 43.8 | 43.8 |

are typically still ahead of the average for all industries with respect to the value of their fringe benefits.

On a percent of salary basis, teachers in the Southeast fare less well. While fringe benefits nationally in all industries amounted to 36.6 percent of payroll in 1983, benefits for teachers in the Southeast more than a year later amount to 31.2 percent of salary when the value of summer leisure is excluded. However, this figure for teachers in the Southeast rises to 43.8 percent when the estimated mean value of summers is added, an amount that compares more than favorably with other industries.

When compared to firms located in the Southeast where fringe benefits are slightly less, or about 33.9 percent of payroll, either comparable figure for teachers (31.2 percent without summer as a benefit and 43.8 percent with summer leisure included) seems respectable at worst and quite advantageous at best.

Average data for the nation or the Southeast may be somewhat misleading. Though teachers' fringe benefits with summer leisure included exceed, as a percent of salary, the comparable percentages given for every industry grouping in Table 7, nationally as well as just for firms in the Southeast, this is not the case when summer leisure is ignored. In this case, fringe-benefits-to-pay percentages exceed those for workers in only these industry groups: food/beverage/tobacco, textiles, pulp/paper/furniture, electrical machinery, department store, wholesale/retail trade, and hospital industries in the Southeast. On the other hand, teachers' benefits (without summer) as a percent of salary fall short of those for workers in the Southeast in all the

other industry groups, including printing/publishing, public utilities, banking/finance, and insurance.

These averages also conceal important information within the region regarding teacher benefits. Fringe benefits for teachers in particular states vary significantly and some care should be taken when generalizing across all states in the region. It is still true, however, that in no state, when the value of summer leisure is included, does the fringe-benefits-to-salary percentage for teachers fall short of the same figure for either all industries nationally or the southeastern region.

# V. CONCLUSION

This research has focused primarily on the fringe benefit element of total compensation for teachers in the Southeast in order to develop a more complete understanding of the teacher compensation picture. This understanding will be necessary if school system administrators are to meet their goals of (1) retaining quality teachers already in the system, (2) upgrading the skills of less-qualified teachers in the system, or available to it, and (3) increasing the pool of highly qualified new teachers. Increasing the supply of desirable teachers will require increased compensation in the form of salary and/or fringe benefits.

The fringe benefit element is a candidate for upgrading because our tax laws do not include benefits in taxable income making them the better bargain for employees and employers relative to salary increases. Compared to a given salary gain, employees can receive through appropriate fringe benefits the equivalent of more disposable income for the same cost to the employer, or, from the employer's viewpoint, the same equivalent amount of disposable income can be given through fringe benefits for a lower total cost. Even though fringe benefits for teachers compare favorably with those available on average in private industry, it is critical that state and local governments use their limited resources to upgrade teacher pay packages at least partly through the fringe benefit element. This is important for two reasons. School systems for a given cost can get more final equivalent income (utility) into teachers' hands through fringe benefits. Second, fringe benefits

are often more highly visible than salary increases and appear more competitive or up-to-date when inevitable comparisons with private industry are made.

In the remainder of this section, the results noted in previous sections of the report will be very briefly summarized and then policy recommendations will be made, followed by suggestions for future research in the area.

## Summary of Fringe Benefits Available to Classroom Teachers

The major fringe benefits identified as available to teachers in the Southeast are the following:

1) social security
2) retirement
3) medical and hospitalization insurance
4) life insurance
5) leave benefits
   - sick
   - personal
   - vacation
   - maternity
   - sabbatical
6) unemployment compensation insurance
7) worker's compensation insurance
8) other fringe benefits
9) summer leisure

Social Security. All but three states require participation by classroom teachers in the federal social security program with the employer contribution paid by the state or local district. Louisiana and Kentucky teachers are not covered by social security and a significant minority of local districts in Georgia (about one-third) have chosen not to participate in the program.

Retirement. All twelve states in the region have mandatory state retirement plans. The two best state plans are those in Louisiana

and Kentucky, which is to be expected since teachers in these states are ineligible for social security. Maximum annual retirement benefits after thirty years of service in Louisiana and Kentucky are about 75 percent of salary, compared with a range of from 47 percent to 64 percent in the other ten states. Florida's retirement system is unique among the state systems in that this is the only state of the twelve that pays all system costs, not requiring any contributions from its teachers.

Medical and Hospitalization Insurance. In five of the twelve southeastern states, medical and hospitalization insurance is left to local districts with varying degrees of direct or indirect funding flowing from state governments. These states are Florida, Louisiana, Mississippi, Tennessee, and Virginia. The other seven states provide state-wide health plans with annual costs to the states per teacher varying from $302 to about $780.

It is in this fringe benefit area that we find the first deviation from the range of benefits available to employees of private firms. Large private firms began offering extra dental and other specialized plans earlier than state-wide school systems, which are certainly not small industries. Of the more state-oriented systems in terms of health plans, only South Carolina has a partially-state-paid dental plan, for example, and this only became available in February of 1985. No state has any vision or auditory insurance plans available, nor did any districts that we surveyed. A few districts did offer subsidized dental plans.

Life Insurance. The area of life insurance appears to be one of the neglected fringe benefits for teachers. Very little life insur-

ance is paid for by states or local districts on behalf of teachers. Oftentimes the amounts are quite small, when it is available as a benefit, ranging from $3,000 to $10,000. These have the unfortunate ring of "burial policies." On the other hand, several states do offer a one-year-of-salary (or some other multiple) benefit at death, sometimes as a part of the retirement system's benefits. In some cases, it is a tricky business to determine whether this is a paid benefit or not. In Georgia, for example, five-tenths of one percentage point is added to the teacher's contribution to the retirement system to pay for their life insurance benefit. Virginia's shared-cost life insurance plan is mandatory and represents the best plan in the group. The primary benefits are (1) life insurance at two times salary, (2) double this amount for accidental death, and (3) dismemberment insurance, with the teacher's share of the cost at $7.20 per thousand dollars of insurance.

Leave Benefits. All states set minimum sick leave policies ranging from nine to thirteen and one-half days per nine-month contract year. Several districts surveyed add one to three days to that minimum. Accumulation of sick leave is allowed in all states from 45 days to an unlimited amount. Only five states allow teachers to take personal leave that is not charged against sick leave. These states are Alabama, Kentucky, Mississippi, North Carolina, and Tennessee. Several of the other states let local districts set their own personal leave policies.

Extended sick leave is not generally available as a specified benefit, though most local districts probably allow teachers to return to their jobs in the system, creating a defacto extended-leave-without-

pay policy. Louisiana, Mississippi, and North Carolina do have specific extended leave policies.

In all states, except North Carolina, maternity leave is first charged against sick leave. Procreation by teachers is not a subsidized activity in the Southeast. North Carolina allows any teacher, male or female, to take up to one full year of leave without pay for the birth or adoption of a child. No paternity leave is recognized in any of the other states.

Only Louisiana offers a true, employer-paid sabbatical leave policy for its teachers. It is very generous in terms of pay and criteria used to qualify for such a leave.

Only North Carolina offers true vacation leave for its teachers, in addition to holidays, personal leave, and summer leisure. The length ranges from ten to twenty-one days depending on years of service. This is a tremendous benefit in North Carolina and coupled with generous maternity and extended sick leave policies makes this state the clear leader in leave benefits.

## Summary of Results and Methods of Valuing Summer Leisure

In Section III the question is investigated of whether working less than a full year is a benefit to teachers or a burden to bear. Both views are certainly held by individual teachers and are not mutually exclusive. The language used, however, needs to be made clear. The teachers who say they wish to work in the summers are not really seeking more work; they wish to have the opportunity to earn higher total incomes. Thus, these people do not mean to say that having their summers

free is of no value, but rather that they would value a proportionately higher income more than they do the leisure time they now receive. Other teachers, who say they like the benefit of summer leisure, simply value the leisure more than the extra salary they would expect to receive if they were able to work two or three more months. Therefore, summer leisure does have value, to both groups, and Section III develops a theoretical model for assessing the value of that leisure and reports the results of some empirical tests.

The theory in Section III suggests that, though summer leisure has value, restricting teachers to an arbitrarily shorter work schedule in a competitive labor market (across industries) will require that teachers be paid a premium for accepting this restriction on total work time and, therefore, on total income. For 1977 data, it was found that teachers receive a premium of about 9.9 percent of their salary compared with all other workers of the same educational level and experience. In other words, teachers' hourly or daily wage rates are nearly ten percent higher than in other occupations to compensate them for accepting the restricted work schedule and resulting restricted income. Of course, this is the figure for the average or typical teacher. Some, who do not value summer leisure highly, are not satisfied with this premium and want more or, rather, the opportunity to earn more income by working longer. For others, who value their summer leisure highly, this premium is far more than sufficient to induce them to accept nine-month positions.

From this theory and the estimated premium for the average teacher, a method for calculating the value of leisure for teachers is devised.

The value of the summer for a given teacher for whom leisure is a normal good must lie between zero and a pro rata extension of the teacher's current salary less the premium. The latter is true because the premium would soon be lost in competitive markets if teachers were able to work a full year. Within these constraints, we felt that the true average value of summer leisure is represented by the opportunity cost of income foregone by choosing not to work in the summers (giving up at least the minimum wage) at a minimum and being unable to earn a continuation of teachers' highest income possible (giving up other occupations where a pro rata extension of teachers' current salaries less the 9.9 percent premium could be earned) at a maximum. Hence, throughout the remainder of the analysis, the value of summer leisure is calculated as the mean of these minimum and maximum amounts.

The major results of our investigation of the value of summer leisure can be summarized as follows.

1) Summer leisure has positive value;

2) Teachers receive a 9.9 percent premium in their current salaries as compensation for a restricted work schedule;

3) Teachers on average are willing to work more weeks at a lower wage rate (by about 9.9 percent) in order to increase their total annual compensation;

4) Teachers on average are willing to work more hours per week at a lower hourly wage rate (5 more hours at about 3.25 percent less per hour) in order to increase their total annual compensation; and

5) Based on (3) and (4) above, school administrators could open schools year round and lower per pupil education costs significantly, for a given number of per pupil instructional hours, and assuming mostly fixed physical plant costs, while raising total annual teacher compensation.

## Values of Classroom Teacher Fringe Benefits, Typical Salary, Total Compensation, and Comparison to Other Industries

Though typical salary amounts are reported in Section IV, the focus of this section is on fringe benefits. Actual teacher annual salaries are lower than those for some alternative occupations and similar to others. Starting salaries, for example, in the region of $14,899 are certainly comparable to 1984 starting salaries of $13,000 to $18,000 in the southeastern region for banking, especially given the extra contract length required for these other salaries. However, the $20,338 average salary with ten years experience and a master's degree appears to be far off the mark, even for nine months.

Fringe benefits appear to be much better. These benefits, excluding any value for summer, range across the southeastern states from 25 to 45 percent of typical salary for beginning teachers, and average 32.2 percent. For the most experienced teacher category (and still excluding summer value), the range is from 23 percent to 51 percent, averaging 30.8 percent. For all teacher education/experience categories combined, the regional average for fringe benefits (without summer) as a percent of salary is 31.2 percent. This is only slightly below the national average for all workers of 36.6 percent and the southeastern average of 33.9 percent.

Of course, when our modest estimates of the value of summer leisure are included, fringe benefits for teachers in the Southeast as a percent of salary far outstrip those available in other industries. Including the mean value of summer leisure for the region raises the appropriate figure to 43.8 percent.

## Policy Recommendations

The suggestions that follow are based on the assumption that fully qualified teachers are becoming more difficult to find in most areas, for whatever reasons, and that positive action is required to increase the quantity supplied of highly qualified teachers in given markets.

1. Increase salaries for the more experienced and educationally qualified teachers. While it is not clear whether the average starting salary for nine months for teachers in the Southeast ($14,899) is low relative to comparable occupations, it does appear that salaries for the career teacher are low. Perhaps North Carolina's longevity pay system could serve as a model.

2. Use a cafeteria style or flexible fringe benefit plan. Teachers are individuals with very different needs. The money spent for their fringe benefits should be put in one lump sum and then teachers should be allowed to "spend" these dollars on a variety of fringe benefits, from deferred compensation plans, retirement plans, life insurance, health and hospitalization insurance, sick leave, personal leave, and so on. The VISTA (Variety of Individual Selections Trust Account) plan available in Dade County, Florida, is an excellent model, though it is far from being fully developed. Doing this has several major advantages. First, teachers would be confronted with a large dollar figure for their fringe benefits that would help them see just how much their full salary or total compensation is. Second, the dollars when used to purchase fringe benefits of greatest utility to individual teachers would generate greater total satisfaction than they do now. (Such problems as a teacher losing some of his or her benefits entirely because he or she is already covered for hospitalization under a spouse's plan could be avoided.) Third, there would be major long run cost savings for employing school districts or states. Currently, when an employer agrees to pay for a basic, individual hospitalization plan, that employer is locked into paying future cost increases which are generally unseen and quite unappreciated by employees, whether teachers or not. But if the employer is committed to providing, say, $3,000 for a cafeteria style individual fringe benefit fund (IFBF), then employer costs would not automatically escalate with rising medical prices. Though there would be pressure for the employer to increase the size of the fund annually, this would be a negotiable item and, further, the employer would get credit

for increasing the committed amount for fringe benefits rather than having the increase hidden as it is now. A flexible IFBF concept would return control to states and districts over the rate of increase in the cost of fringe benefits. (See Seltz and Gifford, 1982, pp. 17-20 for a full explanation of the concept.) This is one suggestion that is beneficial to all parties and can and should be implemented immediately.

3. Specific recommendations with respect to particular types of fringe benefits include the following:

a. Retirement plans that have maximum annual benefits of less than 60 percent of base salary should be reexamined to see if an increase to this amount is cost efficient. Loss of more than 40 percent of salary at retirement is not attractive. Will social security payments plus retirement system payments equal or exceed 75 percent of base salary? An excellent opportunity exists here to stretch salary increase dollars. States could give teachers a raise by "picking up" teachers' share of retirement contributions. If this share is now, say, 7 percent, then the equivalent raise in gross salary dollars is 9.3 percent if teachers are in a marginal tax bracket of 25 percent. In other words, their disposable income or net pay, after the state picked up the 7 percent currently being paid into retirement by teachers, would rise by the same amount that it would if they were given a 9.3 percent raise.

b. Life insurance paid or subsidized by employers is often quite low and offers an attractive opportunity to employers to increase a fringe benefit at modest cost. Here, again, a cafeteria style plan would have a considerable advantage by allowing teachers to choose more life insurance or less depending on their own particular situations.

c. Some personal leave days or vacation days should be available to teachers that are not charged against sick leave. More important than that, teachers should be encouraged (as they are in North Carolina) to take some days off to refresh and rejuvenate themselves. We found that many districts treat teachers as industrial workers, which is not at all the image that should be projected by school systems if they really wish to attract highly qualified people. Some districts and states hand out personal days quite begrudgingly, saying, for example, that approval will not be granted to take personal days on a Friday or Monday or any day preceeding or following a holiday.

d. A true (funded) sabbatical leave policy should be in place, especially if it is desirable to have some teachers retrain themselves in science and mathematics.

This is difficult to do on a piece-meal, course-by-course basis. Further, teachers who are not completely retraining still need two or more opportunities during their careers to rebuild fully their human capital. Just as machines wear out and/or become obsolete with time, it is difficult for teachers to maintain their store of knowledge (their human capital) beyond ten years by simply working full time. Only Louisiana has a good sabbatical leave policy and, even in that state, it is not adequately funded.

e. In lieu of a good sabbatical program, teachers should be paid to return to school in the summers to refresh and maintain their human capital. They are already paid in the form of salary increments that are directly related to education attainment. However, these increments were found to be relatively small in some states. For example, in one state, teachers with a master's degree are paid only a few hundred dollars more than teachers with a bachelor's degree and the same experience. Further, most teachers are incapable of concentrating properly (and do not perform at the graduate level) under those rather trying circumstances of taking night classes following a full day of teaching.

4. Operate schools for a full year and give a significant proportion of teachers the opportunity to teach on an annual contract. This recommendation fits in well with the current push to increase educational output. Remedial, gifted, and other special programs could be operated (at least partially) in the summer. Career teachers who want to teach a full year could be accommodated, while others could continue to opt for the shorter year. Teachers who work in the summer would accept on average an extended contract at a salary equal to at least their current nine-month salary less 9.9 percent plus one-third of that adjusted figure. In other words, costs per pupil day would fall, allowing schools to be operated at lower unit cost.

5. Rethink the entire teacher career structure to allow opportunities for advancement. Most management theories suggest that people are motivated by more than money, though, of course, income is still of major importance. As a rule, teachers have no opportunity for advancement, except perhaps to become a principal, nor any externally recognized measures of success. While teachers are told they are professional, their career ladders are more similar to those of artists--doing the same work for thirty or more years with only an outside chance of special recognition. For example. the accountant leaving college has several career tracks open to him and has some reasonable probability of becoming a partner in the firm and

> earning an excellent income as a result of special diligence or brilliance. Faculty members in universities have at least three ranks through which they may pass and earn special recognition among peers and outsiders at each point. Perhaps, Tennessee's new Master Teacher plan will turn out to be a good approach to this problem.

In sum, we recommend that administrators continue to look at salaries, especially at the experienced levels, as the place to upgrade in order to attract highly qualified young people into the teaching profession; that total fringe benefit levels be maintained, though not necessarily increased; that flexible cafeteria-style individual fringe benefit funds be made available to teachers so that they can select the proper mix of benefits for their own family situations and so that systems can control fringe benefit costs while achieving needed visibility when they do increase monies committed to teacher fringe benefits; that maximum retirement benefits, when added to social security benefits, be at least equal to 75 percent of base salary which is the amount available in the two non-social security states studied; that additional life insurance be made available; that the number of personal leave days be more generous and that teachers be encouraged to take them; that full sabbatical leave programs be put in place to allow teachers to regain and upgrade their human capital every ten years; that teachers be paid to return to school in some summers in lieu of a true sabbatical leave policy; that schools be operated for a full year (or at least some of them) to take advantage of unit labor cost savings and to allow some teachers to receive higher total income (at reduced wage rates) for the year; and that some thought be put into devising a better career path for teachers that includes opportunities

to rise in rank or grade so that visible measures of career success are made available to teachers.

## Suggestions for Future Research

Our suggestions for future research in the area, given below, come from several sources. Some are suggested by our results; some by problems we ran into while trying to gather data and analyze it; others are the result of our on-going literature search, and still others are the suggestions from the many system and school administrators we contacted during the course of the project.

1. A major longitudinal study of a reasonably large sample of college education majors should be undertaken. This would be a relatively high-cost project that could yield very valuable results over a five to ten year period. We constantly were faced with questions of fact in the current study that we could not answer from the literature. How many beginning education majors switch to other majors in college? What other majors? Why? Are they the good students, poor students or a representative mixture? Of those who complete the degree, what percentage actually begins to teach? How many work second jobs in the summer? How many are satisfied with their careers? How many leave the teaching field? Why? For what other occupations? Are they satisfied in those occupations? Are these percentages any different from those who start out to be engineers or social workers? We would envision a major research group (private or university-related) beginning with a sample of two to three hundred education majors from four or five universities geographically dispersed and then tracking them for as long as useful results are obtained.

2. A small study should be made of the mix of fringe benefits that would be selected by a sample of teachers if they were told they had control of the actual fringe benefit dollars being spent on them in their respective districts. Would they choose to spend their $5,000 to $10,000 on more or fewer retirement benefits, more or less life insurance, more or less personal leave, more or less tuition and book costs for college courses, a part-time aide in the classroom to keep records or work with certain reading groups, and so on? All these options would first be priced at so much per unit (per

$1,000 of life insurance, per hour per aide, etc.) and teachers would be asked to allocate their total amount of fringe benefit money across these categories. It might or might not be good to show them first what the average use of the money is right now, with someone else making the decisions for them. This study might provide evidence of how far off the mark administrators currently are in providing particular fringe benefits and/or levels of fringe benefits.

3. A smaller study focusing on the "fringe costs" of teaching, such as buying classroom materials, taking courses to maintain certification, and the like, balanced against the present value of increased future earnings from higher levels of educational attainment and off-setting fringe benefits (such as the availability of teachers' aides) needs to be undertaken. Are there (related or unrelated) benefits, like aides, that off-set having to spend for all those bulletin board materials? Do salary increments due to educational attainment fully pay for time spent in courses and workshops as well as tuition, books, and travel costs that are not currently reimbursed? In other words, is there a net cost to being a teacher that should be subtracted from salary or total compensation?

4. What effect on teacher retention rates does the burgeoning paperwork problem have? Teachers spend literally hours each week keeping track of lunch money (regular cost, reduced, or free) with double entry ledger systems, and keeping track of the progress of students. In South Carolina, keeping track of scores of students on assessment exams is just the beginning. Teachers must record all of those results, and must record how much remedial time or other work is done with individual students to correct problems and bring them up to speed. Records are scrutinized by state education personnel. District records are also required on each student and these are different from the State's. Then there are the local school's records. It is not at all unlikely for a teacher to spend three hours per week on these records or 10% of his or her available instructional time. Or is it? An analysis of the paperwork explosion could be helpful in assessing the severity of the problem. Is paperwork a minor irritant or a major flaw in the current system?

5. Finally, a study of a particular part of the merit pay question--is there a measurable difference between student pre-test and post-test performance that is significantly, if not wholly, attributable to teacher effectiveness--should be made. Teachers will never be accepted as professionals as long as they accept common salary schedules not based on performance or output measures. They are currently paid standard rates plus "input pay." The input pay is for more educational attainment, regardless of differences in output. At least some portion of annual teacher salary increases could

be based on output measures or performance. This would enhance the attractiveness of the teaching profession to potential, high-quality entrants. The first objection we hear is that measures of performance would be mostly subjective and poorly done by principals. (Perhaps principals should take more personnel and business administration courses rather than more education courses.) However, this does not have to be the case. In its crudest form, some one or two percentage points of teacher pay increases could be tied to increases in student performance (output) on statewide standardized tests. Better yet, each teacher could participate in a "profit-sharing" or bonus plan, where if their students, on the basis of a three-year moving average (so one year's aberration would be blended in with other normal years), increase their performance more than the average statewide for that grade or subject area, then those teachers would get some predetermined share of the year-end allocated bonus pool. Some teachers object that tests do not measure everything that is produced, and that is correct, but they can measure the most important element produced by schools: the better ability on the part of students each year to display knowledge of facts and analytical ability. Those teachers whose students consistently perform incrementally better (not better in total since performance levels are related to many non-school factors) should be rewarded. The same objections to merit pay made by teachers could be made in private industry: that particular individuals might not (rarely do) have complete control over the outcome or total performance for the company. But those whose divisions consistently do better than other divisions, or those whose sales gains are higher (per account in the territory) than others get larger bonuses. The incentive system is set in motion. Such a system may be helpful in education.

We would envision a simulation study or demonstration project involving certain schools and their teachers or certain grades where pre-test (from the end of last year or at beginning of the current year) and post-tests exist. A potential bonus pool (amount) that is realistic in terms of what a legislature might enact is determined and made known to teachers. Perhaps one-third of any actual salary increase monies might be placed in such a pool. Then a simulation of the results and likely bonuses to be paid teachers whose students' performance gains are above average could be made. It would be valuable to follow this simulation through three years to see how results might change when using individual annual performance data versus using a moving average of performance gains. In any case, such a demonstration project, if successful and with appropriately publicized results, might well turn the tide of teacher opinion towards moving to a profit-sharing (educational profit, in this case) bonus pay system. Excellent discussions of deferred profit-sharing plans and bonus pay systems exist in business literature (e.g., see Babson, 1974, pp. 139ff).

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